

"I have a romantic attachment to the Labour Party," John O'Leary profiles Opposition education spokesman GILES RADICE, a self-styled egalitarian and gradualist on the left (page 11)



FASHION students at Newcastle Polytechnic spend a term on a design and marketing brief for a major fashion company. Karen Gold reports on this year's collaboration - with High Street giants Marks & Spencer (page 12)

The ideal of "common ownership" remains the least understood and most fiercely argued of Labour Party tenets. Peter Abell looks at the controversial CLAUSE FOUR and argues for an alternative approach to socialism (page 13)

Signs of the times: Douglas McArthur looks at the cultural and educational values of SEMIOTICS. Is this the direction for "communication studies"? (page 15)

Eight years ago as a member of the Think Tank, Tessa Blackstone recommended the dismemberment of the BRITISH COUNCIL. In a review of a history of the council's first half century she has second thoughts (page 17)

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The VAT fight back

The fear that the Chancellor plans to impose Value Added Tax on books, journals and periodicals in his forthcoming budget will have been abated by Mrs Thatcher's reply to a letter expressing "deep concern" about the rumours from Lord Flowers, chairman of the Committee of Vice Chancellors and Principals; Sir Andrew Huxley, president of the Royal Society; and Professor Owen Chadwick, president of the British Academy. In her letter to Lord Flowers the Prime Minister writes: "The position remains that although the Government favours a shift in the burden of taxation from taxes on earnings to taxes on spending, we have no set views at present on how this might best be done."

However, it is unlikely that we have heard the last of VAT on books. Mrs Thatcher has simply told her eminent correspondents that the Government has no "set views" on how to achieve the switch from direct to indirect taxation. The switch itself of course she is anxious to encourage. The Government's urgent desire to cut income tax probably means that no sector of expenditure will be regarded as very long as a VAT no-go area. Those that continue for the present to be exempt are likely to be subject to constant scrutiny. Indeed the Prime Minister's letter gives no categorical undertaking that the Government will not at some time in the future impose

VAT on books. So there is no room for complacency. The Government has not given up. Nor is there room for complacency in a second and more serious sense. For VAT on books is not the simple knee-jerk issue which many suppose; instead it is a tangled collection of sometimes competitive considerations. So we should not always rely on shouts of a "tax on knowledge" to see us through future battles.

The impact of new technologies on the communication of knowledge must be taken into account. The printed word may already be on the verge of losing the predominance it has enjoyed in the field of communication since the days of Caxton. Certainly knowledge is certain to be communicated more and more by other means - video, computers and the rest. The important point to grasp is that these other means of communicating knowledge are not exempt from VAT. So as they grow in importance more and more people may ask why the printed word should continue to receive what is in some sense a subsidy.

There is a subsidiary point that is also important. There has always been a considerable non-commercial element in publishing, an element that concentrated heavily in academic publishing. Authors have accepted very small payment, or none at all, for their work; university presses have regarded

it as their duty to publish scholarly books. In non-book publishing there is little of this non-market altruism. So as the emphasis shifts from the communication of knowledge as a public good to the exploitation of knowledge as intellectual property the case for resisting the imposition of VAT will grow weaker.

Both these new factors have to be taken into account in constructing a stronger defence against VAT on books. Such a defence must depend on more than arguments of immediate expediency and muddled slogans. To see the issue simply in terms of a sacrilegious attempt by philistines to tax knowledge is both misleading and unhelpful. "Knowledge" is already taxed in many ways - through income tax, national insurance, VAT (on purchases if not sales).

Maybe it would be better to charge 15 per cent VAT on the latest Jeffrey Archer and give universities more to spend on their libraries. It is also important to remember that activities with as strong a claim to cultural merit as reading books - going to the theatre or a concert, or enrolling on a (re-creational) adult education course - are liable to VAT. So we will have to work much harder if VAT on books is to be avoided, thinking through and sharpening up arguments that are by no means as self-evident as we suppose.

charitable reformulation is that the NERC will shut laboratories and cut research wherever staff quit.

The conclusion must be that the goal of shifting money into universities - £3.5m by 1988 - should be deferred, or at least scaled down. Even if this is the right long-term path for the council, the cost of such a rapid switch is too high. In addition, there are grounds for reexamining the reasons for the switch, in some areas. Part of the pressure for reducing commitments to institutes within the ABRC comes from departmental chief scientists who cannot avoid paying overheads on work commissioned from council laboratories, but probably can if the same research is done in universities.

The plan as it stands will be published next month, leaving precious few weeks before it takes effect. This would mean change with undue haste, for the wrong reasons. At the very least, the council's fate demands longer discussion. The NERC should rest content with the present rate of staff reduction, around 100 a year, before stepping up the pace in this way.

Research in polytechnics

No doubt much argument will be provoked by the details of the distribution of the National Advisory Body's new research fund which the board at its meeting on Tuesday agreed to recommend to the committee. The total of £2.5m of course is a trivial sum in relation to both what the polytechnics and colleges already spend on research and what the more successful aspire to spend. So some may decide that it is not worth squabbling over the penny packets of extra money.

But the majority will probably not take this relaxed view. Most people in polytechnics and colleges will argue those institutions that have been chosen by the NAB have been labelled as superior to the rest. Being on the NAB's research list, however little material advantage it conveys for the present, is clearly of considerable symbolic importance for the future. So those whose institutions are not on that list are likely to challenge once more the whole basis of the NAB's research fund by arguing that there is no point giving a little extra to a few big institutions with research clout. They are also likely to question the NAB board's competence to distribute the new fund.

The objections to both arguments are similar. If we wait until genuinely "new" money is made available for research in the non-university sector or until the methodology of allocation is changed, much money is available. However much money is available a choice still has to be made between setting up a research funding, and continuing to allocate the total according to formulae based on student numbers.

Not would it have been sensible to wait until the methodology was got right - because it never will be. To some it may seem illogical that the NAB has established a research fund without having any precise knowledge of how much polytechnics and colleges already commit to research. But the universities which have been much longer in the game are still a long way from dispensing with research. As for the detailed allocation, however sophisticated the methodology, it will not satisfy the unlikely, and the lucky of course require no elaborate reassurance of their merit. Very probably the NAB is not fully competent to make these judgments between institutions - but neither is the University Grants Committee or any other body made up of all-time and well-known men and

women. But again if we wait until the NAB is perfect we will wait for ever. There are two important things about the NAB's research fund. First, it has been distributed selectively. There was no alternative because the sum was so small. A non-selective distribution would have given every institution a pocketful of small change. The NAB's distribution is also open to scrutiny and so to challenge.

Second, the role of polytechnics and colleges in research is now explicitly recognized in the mechanisms by which they are funded. That is an important change. Of course the non-university sector has always had a stake in research and in recent years and in some institutions that has now grown to be a considerable one. But informal knowledge is not the same as formal recognition. The NOP poll of academic attitudes, reported in *The Times* last week showed that an overwhelming majority of teachers in polytechnics and colleges believed that their institutions should have an allocation for research in their routine budgets, and were supported by a majority even of university teachers. The NAB's research fund is simply putting into practice this unambiguous aspiration.



Fifth Column

It was entertaining to read in *The Times* excerpts from the material filmed by Thames Television which (over 30 hours of it) was shown on the cutting room floor. Both the incident and much of the material sounds familiar to me. In any of the quality films I have made for the BBC a lot of wonderful patter has been cut to ribbons. I have often looked longingly at the bin but pulled myself together at the thought of actually going through the stuff again.

The only time I persuaded the editor to go back to the bin and recover the discarded film was when we were putting together a film about modern architecture which ended with Norman Foster's Willis Faber building in Ipswich, famous for the fact that its walls are all reflecting glass and the whole building is therefore a never ceasing parade of reflections of people and clouds. What I had put together was something that looked like any other building and when I remarked sadly that we had obviously filmed it badly he agreed and said that the film which he had thrown away was just a mass of reflections.

But just as memory-stirring as the stories about events in the paper offices, sordid places and in the mean and underpaid Times is not much different, I suspect, where else. My latest writing routine was when I took a writing routine of plays and art exhibitions in the burgh to keep the job open for a friend who swanned off to America for a year. I wrote for both in *Glasgow Herald*, the reputable daily, and the *Bulletin* (now defunct) a sister paper. I reviewed for both. The only difference, said my friend as he briefed me before setting off, is that you take a slightly dimmer view of the play for the *Herald* than you do for the *Bulletin*.

In those days I could not type sounds just like *The Times*, so I shuffled into the office in the late evening and tried to write, on half horizontal yellowish sheets like history paper, as clearly as I could the teletype or whatever it was that the swallower it up and sent it away the wire to Glasgow. A few rather drunken journalists wandered in and out and filled the air with loud noise. It was a wonderful experience.

The Scotsman, when I started writing longer articles for newspapers, was much grander and more superior (and of course much more mean). I remember seeing a Thomson wandering blindly through the office one day. "Take no notice," said a sub editor, "it's only the owner, don't suppose he'll notice you."

Some of the stories I heard were turned out to be true of *The Times* as well. For example, there is the account of A. B. Walkley the dramatic critic writing a review of the play and failing to mention that the theatre had burned down before the last act. He protested that he was a dramatic critic, not a news hawk.

I heard almost exactly the same story about the Scotsman's dramatic critic, an endlessly boring, overbearing, and with moderate enthusiasm for such vulgar entertainment - and failed to mention that the theatre had burned down before the last act. It is good to know that the same things happen everywhere, whenever there are journalists about.

Patrick Nutter

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Keep belts tight, says Sir Keith

by John O'Leary

Sir Keith Joseph, Secretary of State for Education and Science, this week acted to fill the policy vacuum created by his postponement of the Green Paper on higher education.

In separate letters to the chairmen of the University Grants Committee and the National Advisory Body, he made few concessions to the two organizations' pleas for new initiatives and additional resources. His message was one of continuing stringency and a determination to alter the emphasis of higher education at minimum cost.

New projections of future student numbers show increases of up to 4,000 per year to the end of the century but go nowhere near the more optimistic estimates put forward by the NAB and the UGC in their advice on long-term strategy. Sir Keith made it clear in his letters that he expects the revised figures, holding total numbers roughly constant for the rest of the decade, to satisfy the demand from qualified applicants.

The student population is still shown dipping below 500,000 (from the present figure of 568,000)

during the 1990s. The NAB had argued that there would be no decline, while the UGC considered the longer-term estimates unreliable.

Sir Keith has not committed himself on the division of those numbers between the universities and the public sector. Instead, he called for tripartite talks between the UGC, the NAB and the Department of Education and Science both on total student numbers and "the shape of higher education more generally".

Such discussions would deal with the detailed planning of provision in particular subjects on both sides of the binary line. Sir Keith told Mr Peter Brooke, as chairman of the NAB committee, that he expected the next full planning exercise to produce "changes in the disposition of academic provision within public sector higher education". Some subjects would have to come under particular scrutiny in order to accommodate a further shift towards science, engineering, other vocational subjects and sub-degree work.

He laid similar emphasis on the so-called "switch" to science and technology in his letter to Sir Peter

Swinnerton-Dyer, chairman of the UGC. But he warned that the Government was still considering the UGC's request for more money to carry out its policy and as much as possible should be done within existing resources.

Sir Keith gave his backing to the UGC's plan to rationalize small departments and announced his intention to continue monitoring and evaluating efficiency in universities after the report of the Jarratt committee in the spring.

Without committing himself to any successor to the "new blood" scheme of university lectureships, Sir Keith promised a review when the existing programme ends next year. But he took a stronger line with the NAB, insisting that all institutions should move rapidly towards the 12:1 student/staff ratio set as a target for the sector.

The letter to Mr Brooke went into detail on the likely financial position facing the public sector in the next three years so that the NAB could get its next planning exercise under way. He forecast a £5 million increase in the advanced further education pool for 1986/87.

NAB moves to create a new league

by Karen Gold

The National Advisory Body is to consider creating up to 50 polytechnics and backing those polytechnics which want to be called universities in early moves towards a new higher education league.

NAB working groups have taken a series of decisions on policy, capital and research funding in recent weeks which imply development of the system into two or three divisions. The main early policy committee, the NAB chairman's study group, has discussed extending polytechnic status in England from the present 29 institutions up to 50. Decisions on which institutions to include would be taken by the NAB on the basis of size, location, range and quality. The group is to consider how to categorize institutions more closely again next month. At the same time the NAB board has approved major capital projects which clearly indicate the institutions marked for expansion in the next three years. Board members weeded out all

the capital projects for small colleges suggested by the NAB secretariat in its list of building schemes worth supporting until 1988. But it kept in the 14 polytechnic building projects approved, sizable sums for two institutions already bidding openly for polytechnic status - Humberstone and Dorset, which gets the larger single sum, £1 million - and two other major colleges, Ealing and Doncaster.

At the same meeting the board allocated its £2.5 million research fund by picking out a "first eleven" among the polytechnics in science and technology research. The departments in the institutions receiving this money were selected "to provide a research base in those departments to enable them to compete equally with their peers in the universities for external funds from the research councils and from industry," says the report on the allocations.

A significant group of "first eleven" polytechnics - Central London, Hatfield, Kingston, Leicester, Plymouth, Portsmouth and South Bank - are

receiving their second or third block of extra NAB funding having already had money for information technology and/or biotechnology. Others, such as Liverpool and Newcastle, are strategically located.

Members of the chairman's study group also agreed they would be prepared to address the use of the title university by some or all of the major institutions in the public sector. They have asked for more information.

Support for polytechnics adopting the title of university has come from NAB board chairman Mr Christopher Ball.

Middlesex Polytechnic, the present leader of the polytechnic pack pursuing the name change, has received some encouragement from its joint education committee, voting seven to five to change its name to Middlesex Polytechnic University. But the decision now goes to the three boroughs on the committee, Enfield, Barnet and Haringey.

Animal test curbs altered

by David Jobbins

Government plans for new legislation to regulate experiments on animals have been heavily modified in the face of criticism from academic and commercial interests.

Ministers have greatly simplified the mechanics of the project licensing scheme which is at the heart of legislation to replace the 1876 Cruelty to Animals Act. Under the proposals set out in last year's White Paper researchers would have to apply for a licence for each new project as well as being licensed as individuals as at present. Originally each project licence application would be referred to senior researchers outside the institution or company.

But Mr David Mellor, the Home Office under secretary responsible for the new legislation, acknowledged the concern about his department's possible inability to cope without long delays when he spoke to the Royal Society of Medicine last week.

But Mr Mellor remains determined that the legislation will have real teeth and will tackle the problems of badly designed, poorly justified or wasteful research.

For the first time details of projected experiments either stopped or blocked by the Home Office advisory committee or the department's inspectors were given in public. In one case bird limbs were to be paralysed to test new ways of spinal cord nerve regeneration. A second proposal to simulate work originally done in the United States to create a state of mental despair.

Glasgow monkey inquiry, page 3

Code of practice for PhDs

by Peter Aspdren

Vice chancellors have produced their report on postgraduate training and research in universities, establishing a new code of practice for the guidance of supervisors and students.

The code, which has been formed by the vice chancellors' committee on academic quality and standards under the chairmanship of Professor Philip Reynolds, vice chancellor of Lancaster University, deals with admission for research degrees, choice of research topic, supervision and final examinations.

Among the code's proposals on supervision is the issue of a statement

sent to both student and supervisor before research begins, setting out their duties and responsibilities.

"The purpose of the statement is to establish clear and explicit mutual expectations and so to minimize the risks and problems of personality clashes, inadequate supervision or unsatisfactory students. It is of great importance that the supervisory relationship should be fully discussed," the report urges.

The responsibilities of the supervisor include giving guidance on the nature of research, the standard expected, maintaining contact with the student, and the standard of the work.

continued on page 3

Lords propose technical training board

by Jon Turney
Sciences Correspondent

The Government should set up a powerful new national Education and Training Board to oversee the supply of people with new technical skills, says a House of Lords Committee. The board, which the committee recommends should be run by the Science and Engineering Research Council, would direct new state funds into selected postgraduate courses, and forecast future employment requirements.

The report on education and training for new technologies from the House of Lords Select Committee on Science and Technology, is highly critical of the Government's reluctance to find extra cash to meet skill shortages. It recommends other new initiatives to boost continuing education, provide large grants to persuade new PhD holders to stay in university

research, and set up joint academic-industrial Engineering and Technology Research Centres. Lord Gregson, chairman of the subcommittee which produced the report, stressed that the problem of skill shortages is wider than the current concern over information technology. "There's going to be as much of a problem applying biotechnology," he said. The report also identifies potential shortages in advanced manufacturing technology, remote sensing and new materials.

Lord Gregson added that the new skills agency proposed by the Confederation of British Industry, as a result of the inquiry into skill shortages mounted by the industry minister Mr John Birtcher, would be designed to plug gaps in the short-term. The new board was needed to make long-term forecasts and help meet needs. "Like the other initiatives recommended in the report, the board would

need new Government money. The new board would include representatives from industry, higher education and Government departments, and would be able to call for reports from Government. The report says it should have some responsibility for funding postgraduate short courses in priority areas. "To introduce an element of direction into course selection which the University Grants Committee in particular has shown itself unable to deliver".

Other recommendations include a system of tax credits to promote industrial investment in education and donations of equipment, greater use of continuing education, especially through distance learning and video instruction - and a national training levy on industry and commerce. House of Lords Select Committee on Science and Technology Education and Training for New Technologies, London, HMSO, 26p.



Deep in thought . . . a first-year student from the London Academy of Music and Dramatic Art practices the reflective posture of an orang-utan, part of a three-hour performance by students at the academy. As part of their course, they visited London Zoo to study the animal of their choice, and imitate its behaviour.



Story, page 5; Leader, back page

DON'S DIARY

SUNDAY

Decide to keep diary for a week. Not sure if I qualify as a "Don" - not even sure I qualify as a lecturer, my official title. We'll see.

MONDAY

Radio goes on at 6.30am, although I have been up since 5am, thinking about Youth Training Scheme article. Cat number one tells me he is hungry by purring loudly in my ear. I am aware that claws come next if I do not obey, so I rise. It is COLD - first hard frost of the year, snow and the breakdown of my central heating. Awaiting plumber's visit and hoping my bank manager will not have a heart attack at the bill. Remember to unplug phone and hide it in the shopping basket before I go out. Cat number two has chewed through the wire on three separate occasions when unhappy with me. Remind myself to talk to colleague who designs things about ideas to keep away from cat.

One good thing about cold - I can now wear my outrageous leg warmers (self knitted). Decide on "wicked witch of the West" pink and black striped ones.

In college at 8.30, hoping to bag photocopyer. Make out milk rota for staffroom (21 people, 10 in rota). I'm "on" this week, but milk is in boot, not in frozen solid. Engineer colleague does his good deed and gets it open for me. Wait 30 minutes for photocopyer. Need to photocopy YTS papers for three workshops I am administratively responsible for. Phone call from one at 9.45: "Uh, two of your teachers are here." "Yes, it is the first day of term." "Uh, didn't we tell you we cancelled all college classes this week? We meant to tell you..." Get in touch with seven other lecturers to tell them - some part-timers, some in other buildings and one more - who else? ponder. Oh yes, me of course.

Drive to other workshop to teach - chat about contracts and invoices. Promise (again!) to find out where contract is in system. I do find out - every time - and every time it's in a different place. There's a black hole between the principal, County Hall, my head of department and me. Whenever workshop manager walks in my direction with fixed look that says "contract" I sink towards lady's room.

Class is difficult - one girl pivot of problems for three months finally gets formal warning.

TUESDAY

Note handle on quarterlight has fallen off. Car was broken into during teaching in "extended college year" on workshop premises. Professional window people obviously not professional enough.

Teach at 8.30. Roll on, roll off means a new bunch today. Blue green leg warmers. Start training them to call me "Laura" and not "Miss". Ready myself for the same questions: "Are you American? Are you going back?" or, more ominously, "When are you going back?" Sigh for the days when I had a class for a whole year and only got the questions in September. Contemplate putting on phony accent. Lots of time spent getting class to do own proofreading for practical communications certificate. Launch tea telephone call to find out what is happening in contracts - on way back to me. Good!

Three hours in afternoon at another YTS programme - assessment/induction to college. One led finalist all three assessments in 25 minutes - a virtually functionally literate and no maths to speak of. Another (range) is a level. Pacing them will be interesting.

WEDNESDAY

Decide on "conservative" brown and pink flowered leg warmers. Get my window fixed, since class is cancelled. Remind myself that part-timers must still claim. Contract has arrived... need copy for head of department, copy for manager, copy for head of department's assistant for invoicing, covering letter to manager. Check milk more needed. Priorities - do I write covering letter or do I go to get milk? Put my coat on.

Sort assessments into three baskets in office for three people to mark. Finally photocopy last term's registers. Workshop demands invoices immediately because of cash flow problems, college bureaucracy won't invoice until contracts are signed and delivered.

Try to make phone calls on confidential case work. Difficult in staff room with constant interruptions, especially since my desk is nearest door. GLC supplies wants to know what to do with filling cabinet. Check back rude answer and point him gently towards caretakers. In a college with 10 or so assorted buildings dotted all over the borough, it could go anywhere.

Evening: plumber comes. With heart in mouth I watch him twiddle his screwdriver for three minutes and - hey presto - the system works and costs £4. Blocked pump is all. Take shower in a now - warm bathroom.

Can't sleep. Hot milk at 3.30, shared with cats. Pompous male acquaintance recently made statement that "it must be difficult being a woman alone in London". Among contracts, car break-ins, central heating problems, cats, telephone wires and insomnia, couldn't agree more.

THURSDAY

Almost get to Natfhe meeting. Instead, panic call at 9.30 - no teacher in one of the workshops. No cover available - I am usually my own cover which makes things interesting. Rearrange meeting and get to workshop at 9.50. Try to get trainees to do part of a lesson on tape recorder - they refuse. Do it myself, cajole, please, demand. "Do not understand the fear of tape recorder and remind myself to talk to colleague about it. Has happened with other groups before.

Three hour meeting in yet another YTS programme about absences and related problems. Come up with ideas plus form of contract to be put to trainees next week, after full meeting of programme staff.

FRIDAY

Sneak off for an hour to get hair done in another college where I am governor. Can't quite shake feeling of being poacher turned gamekeeper, but talk to students doing my hair about security problems - coming up at next governor's as it did at the last one before. Am told the students like doing (my) "young" person's hair, oh well, it can't really be 28, I can at least be a "young" 38!

Back to Hackney, a poacher once more. Both photocopyers broken, duplicating gears fell on ice and hurt himself and is now in. Do not panic - prevail upon one of my buddies in the office to duplicate stencils, then I spend two hours stapling them.

Get note from office saying that part time teacher in YTS programme five miles from building claimed £2.50 last term for Pritt sticks and related items, and will need receipt or will have to repay money. Very rude answer from me. If, however, they insist on a receipt they must expect date to match. See my colleague about producing a stop sign on designing something to stop cats chewing wire. For a man who has designed and built his own bicycle, it should be a piece of cake.

Trot home with enrolment forms to check, assessments to mark, assignments from workshop to mark, two weeks ago and book of short stories of Isaac Bashevis Singer. I have been carrying around for two months. DETERMINED to read. Not much to do this weekend, and I would like to finish leg warmers.

Laura Miller

The author is a lecturer at Hackney College, London.



Shifty, the Gaelic version of hockey, took on a new dimension at Doncaster College of Higher Education this week, where students embarked on a shifty marathon wearing only their nightclothes to raise money for the Ethiopian famine appeal.

Non-teachers go for realism

by David Jobbins

Leaders of non-teaching unions in the universities are expected to adopt what they consider a realistic stance when they push their demands for action on low pay. They are to meet lecturers

later this month to plan a coordinated strategy but are anxious not to frighten off the vice chancellors with exaggerated demands.

Two of the groups - manual and clerical - are pressing for a flat-rate rise

and it is unlikely that this will be rejected out of hand by the employers. There have been suggestions that the unions, who are demanding progress towards the eradication of low pay, would regard a flat-rate £10 a week as an acceptable settlement.

For most non-teaching staff this would mean a rise of just over 10 per cent when the pay element in the recurrent grant is 3 per cent. But union leaders feel that because they represent a small proportion of the university payroll the difference could be met without damage to resources or jobs.

Such a formula is less likely to be acceptable for academic staff, who have higher salaries and form the largest negotiating group. Lower paid groups have been given specific paymen in the last two pay settlements and some senior academics feel that similar treatment this year would further compress differentials.

The vice chancellors are expected to give specific attention to pay problems in March but are already conscious of the pressures on their budgets.

The first formal discussions on salary structure and conditions in colleges and polytechnics began on Monday in an atmosphere totally free of the acrimony which marred this week's meeting of the Burnham primary and secondary committees. There the local authority employers made a formal offer of 4 per cent and pressed for arbitration when this was rejected by the teachers.

It is most unlikely that the employers will adopt a similar approach at the Burnham further education committee which is expected on February 15.

Scots reject proposals

by Olga Wojtas

Scottish Correspondent

Scottish lecturers have thrown out management proposals for common conditions of service throughout the tertiary sector.

The staff side of the Scottish Joint Negotiating Committee, which includes the central institutions, the colleges of education and the further education colleges, argued at a meeting which lasted only 40 minutes that there was too little detail in the management paper to allow any negotiation.

The management side is expected to produce more detailed proposals at the next SJNC meeting in a few weeks' time.

Mr Jack Dale of the staff negotiating team said: "The bare figures that were proposed didn't make much sense." For example, the paper had stated that there would be 24 hours' class contact time weekly, but did not say whether this included examining or course development work.

Central institution staff had to carry out a great deal of work for exams which was not done in further education colleges, but there was no information as to how the proposed figures should be interpreted by different sectors, he added.

Mr George Livingstone, chairman of the Association of Lecturers in Colleges of Education in Scotland, attacked the paper as outlining "the worst set of conditions available anywhere in education". If the proposed holiday entitlements were added up they implied a 40-week session instead of the current 33 weeks, he said.

The ALCES has been particularly angered by the document as it has currently "withdrawn goodwill" in protest at common conditions for the education colleges, agreed three years ago but never implemented.

Mr Livingstone said that many of the ALCES members were now pressing for intensified action. But first local branches would be seeking the support of their boards of governors to argue that the proposed conditions were "irrelevant and inapplicable".

The short shift staff gave the proposals was reciprocated when staff submitted their pay claim, seeking a restoration of the Houghton levels.

Staff had deliberately not put in a specific percentage claim in an effort to avoid the annual deadlock when the management side says it has not yet worked out its budget. However, the management side again maintained that it was unable to respond to the claim.

Solicitors obliged to attend continuing education courses

by Felicity Jones

Solicitors who enter the legal profession after August will have to attend a compulsory programme of continuing education.

Universities and polytechnics were invited by the Law Society to put forward courses for approval and the society is in the process of investigating them.

Newly-qualified solicitors will have to attend four half-day courses in each of the three years after qualifying as well as an obligatory half-day course in office efficiency and professional conduct.

With over 7,000 participants expected by the third year of the new programme, the new law students represent a sizeable market. The problem at this stage is measuring the demand in different parts of the country.

Mr Richard Page, the Law Society's continuing education officer, said that there had been an enthusiastic response to the scheme from institutions and in particular from the universities.

"It is going to be a couple of years before it settles down and we know where the demand is. Obviously there is not much point in having approved institutions geographically close to each other except in London," said Mr Page.

He added that Exeter University was likely to be providing extension courses in the south-west for solicitors in cities like Plymouth. In the north-east, both Lancaster University and Loughborough Polytechnic have joined forces to provide updating and specialist courses in the area as far north as Carlisle.

A wider partnership in Leicestershire and Northamptonshire involving Leicestershire University, law school and continuing education department, and Leicestershire Polytechnic and the law society is also likely to get approval to run courses.

NUS broke pledge, says Hull

A university student union has accused the National Union of Students of breaking a commitment to help pay heavy legal costs.

Student leaders at Hull University are to consider withholding the next instalment of their NUS subscription unless the dispute over the fees, incurred during a lengthy campaign against an amended union fee, and as a result of a library visit last June, is resolved soon.

According to Hull's vice president for finance, Mark Thacker, there was an agreement that NUS meet 80 per cent of the amended fee campaign costs, which he sets at £1,817. But NUS only forwarded £1,000. Later the union incurred a further £1,132 when the university sought an injunction to prevent a work-in on March 30 last year.

The NUS said this week it had sympathetically considered Hull's claim and sent a cheque for £500 - approximately half the sum Hull believes it owed.

Oxford may ban honours for politicians

by Paul Flather

Some Oxford University dons were this week considering a move to ban the conferment of any future honorary degrees on politicians still active in policy making.

The move came after fellows voted by 738 to 319 not to confer such a degree on the prime minister, making Mrs Thatcher the first Oxford educated prime minister since 1946 to be denied the honour.

A political ban was discussed in 1975 after President Ali Bhutto of Pakistan was refused an honorary degree in a similar vote in Congregation, the don's parliament. But the governing Hebdomadal Council turned down the idea.

Now some embarrassed dons, anxious to patch up the university's relations with the prime minister, are considering a ban on the nomination of active politicians to prevent a repetition.

But the proposal would face tough opposition from the same dons who refused Mrs Thatcher the honorary

degree. They see their move as a deliberate rejection of Mrs Thatcher and her education policies - not a vote against honouring active politicians.

The wording of any resolution would be crucial. Thus Signor Alessandro Pertini, the president of Italy, who was voted without an honorary degree this week without any opposition, would as a head of state be considered no longer "active in politics."

This week's vote is being seen as a powerful signal to Downing Street that enough is enough as far as education cuts are concerned and that Oxford dons really do care about less fortunate colleagues in Salford, Aston Bradford and other universities as well as about cuts in colleges, schools and nurseries.

The seventeenth century Sheldonian Theatre was packed for the debate and an anteroom was wired for sound for the overflow. Academics had deserted their laboratories and studies in droves.

The tone for victory was set by Professor Peter Pulzer, Gladstone pro-

fessor of government and public administration, who asked if after all the normal routes of protest had been used whether the dons were any better off as regards education cuts. "Do we have any shots left in the locker?" he asked. "To say no is to send a signal to the Government that enough is enough." To vote now, he continued, was to urge for the immediate, drastic, and radical reassessment and reversal of policies hitherto pursued.

Two types of argument were put forward by the supporters of Mrs Thatcher - that by clear precedent the university should honour one of its most distinguished alumni, and that not to do so would be an illusory gesture which would bring Oxford, not Mrs Thatcher, into disrepute.

In measured tones Professor Pulzer laid into the argument over precedent. He bowed before its weight and paid respect to its power. But, he said, no one had automatic entitlement to any public distinction and this was a time to break convention.

In an impassioned speech Professor Denis Noble, professor of cardiovascular physiology, speaking for the strong science lobby, rounded on critics who said the opponents were being petty and personal. "It would not be here, seconding the opposition if that was the case. The Government was seriously jeopardizing the central purpose for which the university existed."

For Sir Patrick Neill QC, warden of All Souls, friend of the prime minister and vice-chancellor elect, it was a black day. He opened for the supporters with a learned, lawyer's speech, accusing the opposition of trying to "subvert a long, honorable tradition at the university."

There was support for Mrs Thatcher from Lord Quinton, president of Trinity College, who labelled the opponents either "ideological zealots bent on attacking the Government however they could" or "academic stars" worried about their own research.

Dr David Coleman, fellow in democracy at Lincoln College, drew jeers when he suggested Salford may even have benefited from its recent 44 per cent budget cuts. Dr Nicholas Shrimpton, an English don at Lady Margaret Hall, taunted his colleagues that few in redbrick universities cared much for the so-called "academic leadership" of Oxford. Professor Michael Howard, regius professor of modern history warned against "scapegoatism". The opposition would be judged "short-sighted, self-centred, petulant, and really rather silly," he said.

But the opposition was not out to relish its victory. Professor Pulzer and Professor Noble both said afterwards they now hoped the message had been conveyed to Downing Street. A spokesman for the prime minister replied: "If the dons don't want to confer the honour, the prime minister is the last person to wish to receive it."

allow drug companies to test the effects of new medicines in say dealing with a cardiac arrest. All his overseas counterparts are amazed that he should need to waste any time searching for funds.

Yet more and more of his time goes precisely on this. And with the Medical Research Council set to cut some £4 million - Professor Noble himself sits on MRC committees - it will mean that unless he finds new funds to meet his £60,000 a year annual budget his 10-strong team will have to start winding down after October.

"We are knocking down the very cathedrals of our intellectual enter-

prise, the areas which have been our greatest source of pride," he says. "That is why I and others feel so deeply that we are willing to risk people accusing us of being petty and spiteful over this issue."

What annoys him even more is the general chaos he believes is being caused by the random manner in which Government cuts are being carried out.

Professor Noble graduated from University College London in 1960 becoming an assistant lecturer until 1963 when he became a fellow at Balliol, where he now heads the graduate centres at Holywell Manor.

Britain plans national space centre

by Jon Turney

Science Correspondent

The Government is to set up a British National Space Centre to coordinate an expanded programme of space research and development, in response to new European and American initiatives.

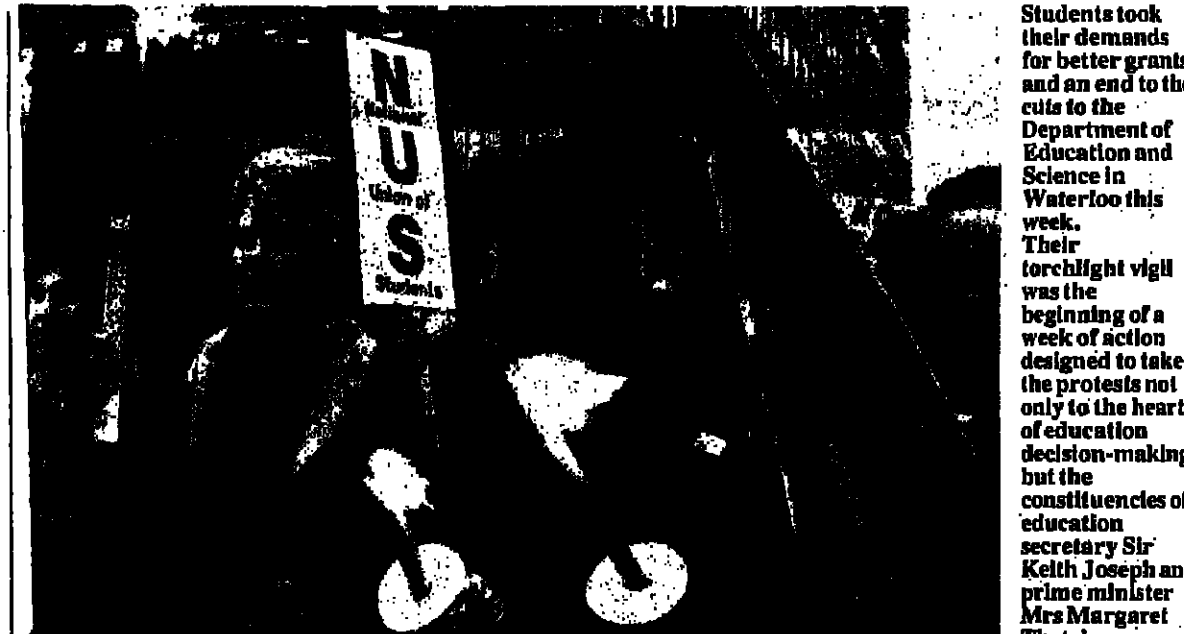
Plans for the centre were announced by technology minister Mr Geoffrey Pattie on Tuesday, immediately before he flew to a meeting of European research ministers in Rome. The European meeting, the first bringing together ministers from the member countries of the European Space Agency since 1977, was expected to approve a package of new proposals for international collaboration.

The ESA sought two resolutions from the meeting. One gives the go-ahead for a long-term European space plan, including an expanded science programme, the "Columbus" project seen as Europe's part in the proposed American manned space station, and development of the Ariane rocket. The second resolution should open the way to set up formal negotiations with the Americans on the precise terms of European participation in the space station project.

Mr Pattie said Britain would recommend that the ESA member nations responded positively to President Reagan's invitation to share in development of the space station. Britain's contribution is expected to be the design for a manned space platform by British Aerospace.

This will only cost £7 million for the early design stage, met by the Department of Trade and Industry. But the Science and Engineering Research Council fears it will have to meet a commitment to a separate increase in the ESA science budget - which Britain will try and set at 3.5 per cent extra a year - without any extra cash.

The new National Space Centre may play a role in resolving problems like this. It is the Government's answer to calls for a national space agency to unite the disparate interests of the DTI, Ministry of Defence and the research councils. But the exact form of the centre, likely to be based at the Royal Aircraft Establishment at Farnborough, has not been decided.



Students took their demands for better grants and an end to the cuts to the Department of Education and Science in Waterloo this week. Their torchlight vigil was the beginning of a week of action designed to take the protests not only to the heart of education decision-making but the constituencies of education secretary Sir Keith Joseph and prime minister Mrs Margaret Thatcher.

Mature student grants row

The National Union of Students in Scotland is fighting Strathclyde Region over moves to reduce grants for mature students, and to axe bursaries for "second chance" students.

Strathclyde Region has discovered that it overspent £300,000 over the last three years to mature students on further education bursaries. The region had paid the students a higher rate including an allowance for living away from home, since as mature students, they were assumed to be independent.

However, the region claimed its solicitors said this overpayment was illegal, and that the lower rate would have to be paid from this term. Some 400 students have now been told they will lose between £400 and £500.

But NUS has taken legal advice which suggests that the students can be seen as an "exceptional case" since they have budgeted on the basis of the higher grant, and that Strathclyde can make a policy decision to maintain their grants. Strathclyde itself is now seeking further legal clarification.

Mr Alan Smart, president of NUS Scotland, said: "Students are being penalized because Strathclyde is incompetent. People are panicking, and a number of people have not cashed their grant cheques, because some of them, frankly, are going to have to withdraw from courses, and will be

New YTS will pay £30 a week

by Patricia Santinelli

A two-year compulsory Youth Training Scheme carrying a £30-a-week allowance is likely to be outlined in a Green Paper in March as part of new education and training plans for the 14-18 age group, prepared by Lord Young the minister without portfolio.

Both the Government and Lord Young are understood to have changed their minds about introducing a White Paper. Instead a Green Paper is being proposed with consultations lasting up to six months, ending in time for an announcement at the Conservative Party conference.

Lord Young gave the first indication of what the new education and training plans might be when he addressed the Society of Education Officers last week.

He said he would like to see a system which contained two new elements as well as routes to higher education. One would be technical, and vocational education for pupils aged 14 and above. This would give them the opportunity to get to know about a range of occupations and ideally provide some work experience.

The second would be work-based training for those who left school at 16. This would build on the existing Youth

Still asking after 22 years

Nobody could accuse the students at Aberdeen College of Commerce of acting hastily. They have finally taken militant action in support of a students' union - 22 years after first asking for one.

At present, sole facilities for the 2,600 students are a common room which can hold 180 people, and the college canteens.

PNL evidence

Members of the public, local MPs and councillors and all interested parties have been invited by the Inner London Education Authority to give evidence to the Browne Inquiry into the Polytechnic of North London. The inquiry, chaired by Miss Sheila Browne, principal of Newnham College, Cambridge, had its first meeting last week.

Nice work

Napier College in Edinburgh has revived the "naid alliance" between Scotland and France with a concordat between itself and Nice University in Edinburgh's twin town.

Nouvelle idea

Goldsmiths' College is to be the first English-speaking centre for an "Observatoire du Français Contemporain" one of the worldwide networks of observers of new words appearing in French, mainly via the mass media. New French words discovered by staff at Goldsmiths' and elsewhere in London University will be sent via the college's computer to the archives of the Paris-based Institut National de la Langue Française.

Strike averted

College lecturers in Cleveland have called off their industrial action after top level talks over the terms for setting up a new training centre which they feared would take away their work.

Cert edited

Every kind of qualification from CSEs and GCSEs to first and higher degrees including those awarded by professional associations and institutions is listed in the revised 15th edition of *British Qualifications* published yesterday by Kogan Page. The guide also lists all the universities, colleges and polytechnics which run the appropriate courses leading to those qualifications, together with course entrance requirements, £19.95 hard-back and £14.95 paperback.

Training Scheme, perhaps providing a longer period of training.

"The starting point is clear, Lord Young said. 'We must accept and give explicit recognition to the objective of making young people competent for work. Coupled with that must go a determination to break down artificial barriers between academic and vocational learning, and to build a system of education and training which is a continuing preparation for employment.'

Manpower Services Commission area offices were picketed yesterday by the Youth Trade Union Rights Campaign, as part of the fight against making the YTS compulsory.

The campaign successfully fought off attempts to make the YTS compulsory in 1982 through loss of benefits, and expects several hundred young people to take part. In addition delegates were to present a petition outlining the case against to key area offices in London, Liverpool and Sheffield.

The campaign plans to present a petition to the Prime Minister and MPs on February 28 during a mass march on Parliament and the Manpower Services Commission. By then it hopes to have collected 234,000 signatures, the number of 16 and 17-year-olds claiming benefit.

UEA censures council member

by Peter Aspdon

A member of the University of East Anglia council, Mr Ian Coutts, has been censured by the council for spreading "misleading and inaccurate information" about non-teaching expenditure in the university.

His comments were made in a letter to *The Times*, in which he claimed that, as a member of the council, he had been "regretfully unable to obtain any cutback in the level of non-teaching expenditure".

The council said Mr Coutts's remarks were inaccurate, and he had failed to check his facts properly with university officers before going to a public forum.

UEA's information officer, Ms Joanna Motion, said in the three years since the 1981 cutbacks, the council had approved reductions in non-teaching spending of just under £1 million per year, or by 15 per cent, with the loss of 55 posts.

That compared with cuts of 10 per cent in academic departments over the same period, she said.

Trade union officials representing non-teaching staff and students called for Mr Coutts to be expelled from the council, but they were defeated and the motion of censure was passed instead.

The council said it was "unhappy that after it had made a decision about levels of expenditure at a meeting when Mr Coutts was present, he took his minority view into a public forum and wrote to the *'Times'* with misleading and inaccurate information, without any consultation with university officers". It also dissociated itself from Mr Coutts's views, as expressed in his letter.

"I have been on the council for ten years, and have consistently criticized the amount spent on student welfare. I think that as much money as possible should be made available for the purpose of teaching and research," he said.

He said he had voted against students having their rooms cleaned, the subsidising of canteen facilities and the building of houses for students with children.

"It is amazing that although we are poorer than France and Germany, we provide students with residential accommodation rather than have them living at home. It is a waste of resources."

"What other group of 18 to 25-year-olds have help to clean their rooms, and have 55 porters and security staff, as at UEA, who are twice their age, supposedly looking after them?"

Concern expressed over

by Patricia Santinelli

Fears that the Government's newly-imposed model of teacher education would stifle innovation were expressed this week by Professor Alec Ross of the University of Lancaster.

Professor Ross, who is director of the university's school of education, was delivering the centenary lecture on "Education for the future" to mark the 100th anniversary of Edgworth College of Higher Education, Clonsilla.

"While some of the criteria might be sound, the principles underlying them required careful scrutiny. It is to be hoped that this new Government initiative will be based on the soundest of experimental research so necessary in solving the difficult problems which have to be tackled," he said.

He added that there were requirements which could be interpreted in such a way as to cause course developers to produce what they assumed

would match the criteria rather than reflect their own professional judgment, and particularly that of those who will teach the course. This could turn them away from thinking through their own solutions to problems and matching local needs and possibilities.

Earlier Professor Ross had advocated strongly the need for the design of BEd courses to continue to be flexible, innovative and alive.

He strongly defended the "integrated" model of initial teacher education leading to the BEd against a climate of Government opinion which in recent years had veered towards a more fragmented approach.

The Government's advisory body on teacher training recommended this week that one-year business studies courses should be ended from this academic year but that similar courses in craft design and technology should continue for another two years.

OU new technology role is stressed

The Open University has a vital role to play in training for the new technologies, Mr Brian Oakley, director of the government's Alvey programme in information technology, said this week.

He was speaking at a press conference celebrating some of the 30,000 Open University students who successfully completed their courses last year.

Through the foresight of its founders, the OU presents an instrument ready to hand to cope with the pre-

dicted shortage by 1988 of 5,000 IT graduates, said Mr Oakley. He did not see how the country could tackle the task without the university.

Attempts by the Department of Education and Science to increase the throughput of graduates had still not met the demands, whereas the Open University could help through its normal undergraduate programme, its postgraduate conversion courses and widening through the continuing education programmes.

I could never see what all the fuss was about regarding the proposed celebration of VE Day - nor the fraught German reaction. Just because the years pass and generations so easily forget, we should not be deterred from doing everything possible to celebrate the defeat of Hitler.

The lesson learned so painfully by my parents' generation before the war, we have relearned in large measure during the miners' strike. The power of the mob orator was there to be seen again: the intimidation and abuse of individuals, families and entire communities, the massed violence of hundreds and hundreds of men on the streets.

Arthur Scargill might feel at home in the Soviet society he has always admired, but the methods are those of the old fascism. It only there had been television to show Hitler's ugly mobs for what they were.

To reason with Scargill's incapability, to ignore his unscrupulousness, is to concede to it and strengthen him. The miners should have a great future, Scargill must not.

Unemployment is a tragedy of

PARTY LINE

A dramatic new picture begins to emerge

immense proportions, but its solution does not lie in an indefinite maintenance of outdated working practices and inefficient enterprises. When the miners' strike was in its first month, the Chinese minister for coal visited this country. He came to look at the pits and the equipment which were second to none in the world.

But this is not Mr Scargill's vision. He seeks to condemn generation after generation of miners' children to conditions that we no longer allow pit ponies to work in. No thought here for the mobility and aspirations generated by education and continuing education. No thought for those with ambition to take a white collar professional job instead of falling further down the pit.

In many instances in fact, certainly in the Yorkshire coalfield, it

is simply no longer the case that these are the pit communities of old. Large numbers of the miners who live in them have actually migrated there from other declining coal areas. In large measure they are not even self-contained communities any more. There are within striking distance of large conurbations and many miners commute to their pits from smart suburban bungalows.

Yet the simple message, the big lie and the self-assured authority which is the hallmark of the Scargill technique and so ideally suited to television seeks to perpetuate the myth.

Let us recognize that the day of the conventional pit community has passed and let us recognize also that we must go back to the conventional (and employment) patterns of the past - when men (and not many

women) had lifetime jobs. This means that government policy needs to seek on every front the expansion of opportunities for adult learning, retraining, phased retirement and part-time work. But if we are to have a more balanced and constructive approach to the huge problem of employment and the pattern of work in modern society, it will not be cheap.

Scargill's Luddite intransigence is not irrelevant to this, though the Government has laid down the economic cost of the strike it has been considerable and clearly has contributed to the falling confidence in the City.

Dollar strength and sterling per centage status may have been the immediate and critical factors behind our recent currency crisis. But "petrocurrency" can easily become a convenient shorthand for a

wider disenchantment with British economic policy. All this now makes the awkward for the "expansionist" Tory party. If the market believes that inflation is not being kept low enough, the present monetary policy is becoming too loose and the Chancellor is too determined to lower interest rates in order to boost growth; that big tax cuts are dangerous for the balance of payments and are at the best prepared to overlook the fact that the public sector borrowing requirement is projected to be £2.2 billion, and ignore the extra £2 billion of revenue from oil prices in dollars that would have been available if the argument for more public spending on the infrastructure and on services like education.

The psychology of the City being what it is, however, a resounding Government victory over Arthur's related easing of wage pressure and a jump in the growth rate could change the picture dramatically.

Keith Hampson
The author is Conservative MP for Leeds North-West.

Easier to get to the bar

by Felicity Jones

Law graduates are finding it easier to become practising barristers contrary to common belief, according to a survey by the Association of Graduate Careers Advisory Service working party on the legal profession.

Oxbridge graduates have double the chance over polytechnic graduates of securing tenancies in chambers and achieving their ambition of becoming a barrister.

The survey is the result of a questionnaire sent to 366 law graduates who comprised 25 per cent of the graduates of the 1979/81 academic years who went on directly from their law degrees to the bar final course at the Inns Court School of Law.

Judged against their own goals, 67 per cent of those who wanted to become barristers have either achieved them or anticipated success set against 53 per cent in a similar survey carried out in 1981.

The report concludes: "Despite all the opinions expressed on the subject, the returns clearly suggest that it has become a little easier in the last few years to find a tenancy."

The findings confirmed the widely held belief that Oxbridge graduates are most successful, with 70 per cent of law graduates from Oxford University finding places in chambers compared to 45 per cent from other universities and 32 per cent from the polytechnics.

It proved easier to make a start in practice in the provinces than in London where earnings were 6 per cent higher but with lower expenses.

While the successful barristers can earn large salaries - four graduates of 1980 already had gross earnings of £20,000 after 18 months - most of the graduates are earning less than other professionals in the early stages of their career.

Seven of the 23 graduates of 1980 in London are earning gross £7,000 or less and the same low income level is reflected in the provinces.

Lack of education research criticized

There is a need for more research in education training institutions, according to Mr Stuart Johnson, Leeds director of education, who told a meeting of the Society for Research into Higher Education in London last week. "Education does not have an impressive record of research."

People in higher education might claim to be able to teach without research, he said, but those who were involved must be the better for that. It should be a recognized part of the career pattern in teacher training.

Mr Johnson called for training institutions to offer more advanced diplomas and higher degrees. He said Leeds spent £5.8 million a year, or 5 per cent of its education budget, on in-service training. "If you believe in a

good teaching force you must invest heavily in staff development," he said.

The emphasis on developing teachers' skills has not prevented shortage of some specialist teachers in Leeds which, Mr Johnson admitted, is very short of "qualified, quality teachers". In the three to seven age range, teachers of languages, mathematical studies and "in some difficulty" about the supply of teachers in economics and business studies.

Mr Johnson said Leeds had been involved in setting up a regional professional partnership committee but he added: "There are a lot of sceptics about professional partnership who see it as more talk than practice." During discussion, it was clear that

many of those present were not about the casual sprouting of professional partnership committees throughout the country as a consequence of the DES circular 504 criteria for approval of teacher education courses. This circular was criticized by Derek Sharpley, Warwick College of Education.

"It has little to do with young people," he said, adding that the writers were guilty of "gross naivety" in failing to spell out what lack of clarification might mean to the committees with questions of policy. "I do not believe these committees have a basis for communication," he said. "If we are not careful they miles away from what participants trying to get at."

Liberal Party

All this now makes the awkward for the "expansionist" Tory party. If the market believes that inflation is not being kept low enough, the present monetary policy is becoming too loose and the Chancellor is too determined to lower interest rates in order to boost growth; that big tax cuts are dangerous for the balance of payments and are at the best prepared to overlook the fact that the public sector borrowing requirement is projected to be £2.2 billion, and ignore the extra £2 billion of revenue from oil prices in dollars that would have been available if the argument for more public spending on the infrastructure and on services like education.

The psychology of the City being what it is, however, a resounding Government victory over Arthur's related easing of wage pressure and a jump in the growth rate could change the picture dramatically.

Keith Hampson
The author is Conservative MP for Leeds North-West.



Good vibrations . . . a collection of musical instruments, complete with working demonstrations and displays, are currently on display at Kent University's physics laboratory. The exhibition is aimed at demonstrating the wide variety of sounds and vibrations associated with the instruments.

Guide for student teachers

Student teachers should spend no more than 70 per cent of their time in classrooms when on teaching practice, according to a new guide.

They need more time for preparation and marking than experienced teachers, the National Union of Students says in its teaching practice charter, which is endorsed by the country's second-largest teacher union, the National Association of Schoolmasters/Union of Women Teachers.

The charter appears in the guide jointly published this week for all teacher education students by the two organizations.

The guide says that no teaching practice student should be asked to cover for an absent member of staff or for unfilled vacancies.

"Teaching practice is intended to develop and assess your skills in a controlled environment," it advises. "To be asked to cover, often at short notice and without adequate preparation, is an abuse of teaching practice."

Practical advice on teaching techniques and styles is included in the guide, starting with the dreaded first lesson. "You should stand in your classroom having put the finishing touches to your preparation and await the start of your first class," it says.

"You are no doubt, by now, apprehensive, the confidence you thought you felt is gradually ebbing through your shoes. . . . As the class will outnumber you by substantial odds."

"Nevertheless you have the advantage of several more years' experience of life. . . . On average you will have intellectual advantage over the majority of your class and this is a substantial advantage."

The guide also warns student teachers about their appearance: "Imprecise standards of appearance imply a high expectation of standards of behaviour, while a scruffy appearance suggests the opposite, it says."

An Education Student's Guide to Teaching Practice, NUS and UWT, Hillcourt Education Co, Rednal, Birmingham B45 8RS.

Cash call in youth report

by Patricia Santinelli

New resources must be provided for jobless youngsters if the benefits of the Youth Training Scheme are not to be undermined, a new report published this week says.

The report was produced by Youthaid and the National Youth Bureau after examining post-YTS provision throughout Britain. It found that although widespread, provision suffered from lack of funds. Government support, strategy and local co-ordination.

In particular, local voluntary groups are so desperate for cash that they compete for funds rather than cooperate in provision. Much of the local provision depends on the goodwill and work of dedicated people. Lack of resources often means that only advice can be given when jobs or education are vitally needed," the report says.

The report calls for action on four fronts. First it wants the Government to determine a national strategy of opportunities for work and training for all those leaving the YTS without a job. Second, it says that existing YTS schemes should have extra funds to enable trainees to be properly supported in their search for work.

Third, the report calls for employers to be given subsidies for the costs of paying and training YTS leavers, and replacing the existing Youth Worker's scheme. Fourth, it says provision should be locally determined by a partnership of local authorities, businesses and voluntary organizations.

Speaking about the report and calling for Government help, Mr Paul Lewis, Youthaid director, said that the Government had put huge resources and political commitment into the YTS.

"Now it must embark on a major new effort comparable to the YTS itself to give work, hope and income to those young people leaving YTS without jobs. The dole should not be their introduction to adult life," Mr Lewis said.

In its specific recommendations for the various sectors, the report says that education and training providers should look at ways in which their provision and resources can become more accessible to more young people.

They should for example look at the match between current provision and the needs and preferences of the whole client group, and make full use of the 21 and 12 hours rule by designing courses which they can attend while unemployed without affecting their entitlement to benefit.

In addition the report recommends that they offer advice to local projects and help to develop courses in new areas such as self-employment or community work, and for entry to second-year courses.

The research was supported by the Calouste Gulbenkian Foundation, Cadbury Schweppes, General Electric Company, IBM, ICI Petrochemicals and Plastics, Lloyds Bank and Stewart Wrightson.

Post-YTS initiatives by Youthaid and the National Youth Bureau available from either 9 Poland Street, WC1, or 17-23 Albion Street, Leicester LE1, £6.50.

Liberal probe student finance

The Liberal Party is setting up its own inquiry into student financial support, but unlike the Government's review it is intended to cover all post-16 students.

Chaired by Mr Clement Freud MP, the party's education spokesman, it will consider evidence from a wide range of people by March so that the party can be ready to respond to any Government proposals. Its aim will be to devise a policy which will underpin the party's established policy of widening access to higher education from traditionally under-represented groups.

But the party hopes to avoid the inquiry developing into a further grants versus loans tussle. Mr Freud said: "Student loans would in no way make the jump up and down and say 'over my dead body'. But no scheme has been put forward which would do anything but frighten students."

FCS saturates union election

by David Jobbins

Conservative students have carried out their threat to flood the National Union of Students with nominations for its national executive.

The Federation of Conservative Students, the official party student organization, has nominated up to 10 candidates for each of the five full-time NUS posts which will be contested at the Easter conference. Their avowed aim is to disrupt the conference. Several of the nominations are for people who played a prominent role in reducing last December's NUS conference to near chaos at times.

Among those contesting the presidential elections are Mr Guy Roberts, from Leeds University, and Mr Michael Dark, both of whom are associated with the Monday Club, and Mr "Wee Harry" Phillips, the former right-wing chairman of Westminster Young Conservatives and now a student at Thames Polytechnic.

But the elections will also be con-

tested by Conservative Student Unionists, the group working within FCS to bring about constitutional and political reforms in the NUS. One of its founder members, Mr Chris Davies, currently the only Tory on the NUS executive, is standing for president, and the CSU will also be fighting three other seats and three part-time seats.

Mr Davies dissociated himself from the "headbangers" of the FCS and expressed the hope that their actions would "not detract from one of the most positive Tory campaigns for years".

CSU intends to bring forward its alternative strategy designed to make NUS more effective and less political.

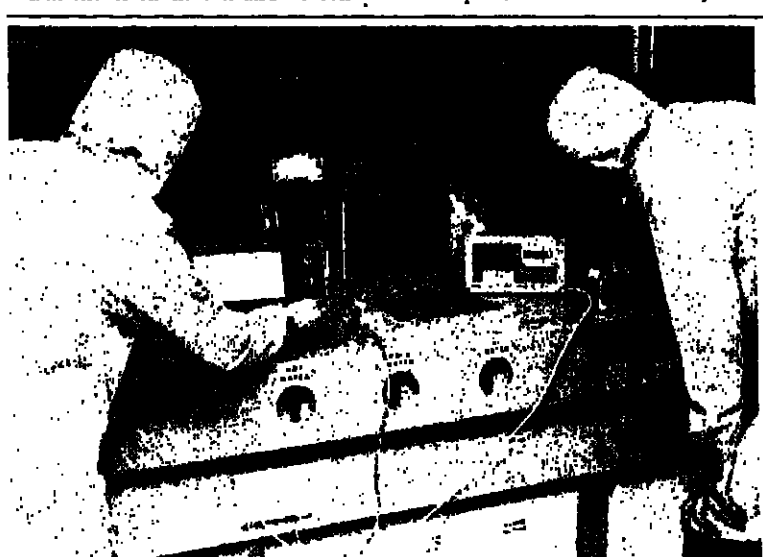
The FCS nominations were lodged before they could be discussed by the organization's national committee, which was due to meet this week, and are likely further to antagonize NUS, which is already angry at the alleged activities of some prominent members last December.

NUS president Mr Phil Woolas, who

is seeking a second term in office, said: "They are treating the student movement as if it was a public school prank. I do not believe the majority of Conservative students, let alone the party which finances FCS, will tolerate this sort of thing for much longer and feel it is about time responsible Conservative students stood up to make their own views felt."

There is considerable concern within Conservative Central Office at the activities of the FCS, but a recognition that there is little to be done to curb its excesses. All the signs are that party leaders and senior officials would prefer a less flamboyant image from FCS and would be inclined to support moderates who found deliberate disruption of democratic organizations too much to swallow.

They share the view expressed by party chairman Mr John Selwyn Gummer almost a year ago that students should join in their student unions and argue Conservative policies from within.



Scientists from Essex University's physics department examine the findings of their research on semiconductor physics. Professor Brian Ridley of the department has just received a £183,632 grant from the Science and Engineering Research Council to help his research work. Outside funding for his work in the field now amounts to £678,266 over the last two years.

Distance learning proposed for social work training

by Felicity Jones

An agreed system of distance learning study could become an integral element of social work training, if the proposals of the Central Council for Education and Training in Social Work are accepted by the field.

All students would be expected to have at least one year of full-time education and training to qualify for a single certificate.

But full-time study would not necessarily be college-based. Proposals put by the Council in its paper 20's Policies for Qualifying Training in Social Work includes one year of employment-based study with increased requirements for study and tutorial time by means of distance learning and agency-based study with block release at college as possible options.

The council has put its weight behind a single qualifying award to replace the present Certificate in Social Work (CSW) for people who hold posts in social work and the

recently introduced Certificate in Social Service (CSS) which covers a range of jobs. The planned single award, however, would have two routes to the certificate to replace the existing dual system.

The decision to have a single system of awards was taken at the October meeting of the council after a working party chaired by Professor Playford.

These proposals controversially state there should be two levels of awards. The latest policy document sets out the proposals around which a series of consultation meetings will be held from the end of next month to judge what the implications of the single award will be for the educators of social workers.

It is also planned that the current minimum period of training before qualifying will be extended beyond two years. Social workers have a shorter period of training compared with most other professions with similar responsibilities.

Warwick invites co-driver on to campus

Warwick University and Austin Rover have announced plans to establish an advanced technology centre, to be run jointly on the university campus.

The new centre will provide purpose-built research facilities to carry out projects for Austin Rover, using "new blood" entrants from the university. About £5 million has been invested in the centre, which is the first of its kind in Britain.

The scheme marks the latest stage in the partnership between the company and the university's manufacturing systems engineering group, headed by Professor Kumar Bhatnagar.

He said: "There have been Government reports over many years urging closer cooperation between academia and industrialists. This project provides for that cooperation in a way which is unique in the United Kingdom."

vestment is integrated directly with the best practice in hospitals for the benefits of the wider community, there is a parallel in our relationship with manufacturing industry."

The centre will have an important training role, complementing the university's integrated graduate development scheme.

Mr Jack Butterworth, the university's vice chancellor, also paid tribute to the concept behind the establishment of the centre. "As a nation, we have always enjoyed the reputation of being great innovators, but we are often unable to capitalize on our innovations which are then developed in other countries, where the main benefit is then reaped," he said.

"I welcome this joint venture as an imaginative and effective means of transferring the best of university research directly into the industrial sector."



Professor Bhatnagar: cooperating with manufacturing industry



Usage and abuse of training

As a living language, many English words undergo significant changes in usage in a relatively short space of time. It is beginning to look as if the words "training" and "retraining" are undergoing a major change.

For most people the word "training" implies preparation for some kind of employment. Increasingly, however, "training" and "retraining" are being used to mean not preparation for work, but some kind of activity, allegedly employment related, because for political reasons, we must be seen to be "doing something" about unemployment, since as a society we seem unwilling "to" do the only "something" which could really alleviate the situation - i.e. create jobs.

Training - genuine training of young people and training and re-training of adults - for such real jobs as there are is clearly a high priority and one which has been too long neglected by Britain. However, if we use this undoubtedly priority as the excuse for switching increasingly scarce resources from one area of the education system to another we are in danger of compounding the deprivation of people who are already among the most ill-used in our society, because we will be offering them neither meaningful training, nor any of the other benefits which some of us at least still believe education can bestow.

Higher education is increasingly being urged to serve its "market" better. Usually this means the "switch" to enable more courses to be provided in the technological areas. Government policy ensures that this can be done only at the expense of the non-technological provision, but the "market" of higher education must be much more than training for industry, although this is a crucial part.

The old liberal conception of education as a process training valve in its own right is just as valid now as it has always been, a valve which is equally relevant for adverts as for young people.

The board of the National Advisory Body is just beginning the early stages of its next major planning exercise. This exercise will produce frustration, possibly anger, certainly criticism and a vast amount of work, both for the NAB secretariat as well as for institutions. When it is completed few are likely to be happy, although many will probably be resigned and some no doubt relieved.

But, to misquote the famous NAB is the best planning body we "have" and whatever strategem the NAB is being to adopt in order, yet again, to try and squeeze a quart of higher education out of a pint pot of resources the needs of adults in the widest sense must be recognized and catered for.

This must include the recognition that needs differ in different parts of the country and that what might well be appropriate in the relatively affluent South East can be at best inappropriate and at worst totally irrelevant in, for instance, the North West.

Institutions which are already recognizing this in their programmes must be supported; those which are not must be encouraged to do so. If the NAB fails to do this, it will be acknowledging that planning in the public sector is unable to make even a minor contribution to easing the greatest social tragedy of the decade.

Peter Dawson
The author is general secretary of the National Association of Teachers in Further and Higher Education

Geochemists find answer to the stars

from William Norris

WASHINGTON
Researchers from the University of California, working at the Los Alamos National Laboratory in New Mexico, are gathering geochemical data which may provide answers to the formation of our solar system and the stars.

They are using a new nuclear probe to analyse, on a microscopic scale, how trace elements are distributed in meteorites, synthetic materials, and terrestrial samples. Results from these studies may explain how the geologic materials were formed, how fast they solidified, and what chemical processes occurred during their formation.

The scientists are using a Van de Graaf accelerator, one of the early "atom smashers", to generate million-electron-volt particle beams. This nuclear probe, designed by Carl Maggiora, provides a unique and powerful way to examine geologic materials without destroying them.

Mr Maggiora claims that the new analysis technique is similar to assembling an intricate jigsaw puzzle. Researchers are using the accelerator in an unconventional way by taking complex geologic materials, or "whole puzzles", and non-destructively separating the chemical components with the nuclear probe to determine how the material was formed.

Each trace element is potentially rich in information. Identifying these elements by their "signatures" - emitted X-rays, nuclear reaction products or scattered particles - yields clues on how much of each element is present in the geologic samples.

Mr Maggiora, who is a physicist in the electronics division at Los Alamos, says that the technique enables his team to ask more detailed questions about the complicated problems of what goes on in geologic materials.

"For example, we can now rapidly detect many elements, including the very important 'rare earth' elements, in concentrations impossible to see with electron microprobes. Analysing these elements will help to understand the mechanism and the scale of 'nebula condensation', which formed the planetary bodies and how these bodies developed their layered structures," he said.

Patricia Smith charts the expansion of higher education in Cuba since Fidel Castro came to power

A revolutionary growth

It is well known that the university rebels of yesterday are often the rulers of today. But nowhere is this more evident than in Cuba where many of the guerrillas who fought with Fidel Castro and Guevara in the Sierra Maestra and clandestinely in the cities were former student activists.

When their revolutionary movement toppled the United States-backed Batista dictatorship on January 1, 1959, they took power and many are still there.

These student rebels came from privileged class backgrounds. In 1959 there were only three universities with 15,000 students. Today there are 46 higher education centres with over 240,000 students. The figure represents 2.4 per cent of Cuba's 10 million population and over half of those are women.

Higher education was called to account at the end of December at the People's Power National Assembly or parliament. In its seventh period of sessions, it was the only ministerial report among five major items up for debate and as such indicated the priority Cubans are giving the sector.

Higher education in Cuba was not exactly the question of starting from scratch as the authorities sometimes make out. But the University of Havana, founded in 1728, was elitist and its higher education minister Fernando Velasco Alegre told the 500 members of parliament.

In fact the university occupied a position of some distinction in Latin America producing many of its prestigious intellectuals and in the late nineteenth and twentieth centuries becoming a virtual "hub of revolutionaries".

But it was a system imported from Spain geared to producing cadres for colonial and later neocolonial rule and not within the reach of the majority. Illiteracy and lack of elementary education were the main problems the rebels faced when they took over. Brigades were formed and sent into the countryside on a campaign which changed the illiteracy rate from 23.6 to 3.9 per cent by 1961, according to a

Bonn to join space project

from Barbara von Ow

MUNICH
The Bonn government has taken an important step in moving Western Europe towards a high-technology space age by agreeing to participate in the planned American manned space station.

Following months of deliberation, the cabinet also decided to contribute to the development of an advanced version of the Ariane European space rocket. However, it did not pick up a purely European space shuttle project to be called "Hermes".

Mr Heinz Riesenhuber, West German minister of research and technology, said Bonn was willing to put some DM 2.8 billion into "Project Columbus", the European part of the permanently manned space station planned by the Americans, and DM 1.7 billion into "Ariane 5". Each programme would cost an estimated DM 7.4 billion over the next 10 years.

Bonn's contribution to Project Columbus (37.5 per cent) would be the biggest of all European nations, giving it the lead in the scheme.

West Germany's decision follows an appeal by President Reagan for

Europe, Japan and Canada to join in the space station project, which the US plans to launch in 1992 - the 500th anniversary of Christopher Columbus's discovery of America. Britain, France and Italy are expected to announce their decision at the ministerial conference of the European Space Agency (ESA) in Rome at the end of this month which is expected to approve both projects.

The Bonn government, which shares the fear of many other West Europeans that the continent is falling too far behind the United States and Japan in developing the most modern technologies, hopes that Project Columbus will enable Europeans to close the gap.

Apart from access to space-based technology it also expects to gain experience in developing orbiting stations that could reap commercial benefits.

As outlined by Mr Riesenhuber, Project Columbus would consist of a manned module to house men and a laboratory, with unmanned platforms for experiments, a separate supply unit and a service vehicle to move between the space station and platform, to be installed in later separate phases up to the end of the century.

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Apart from technological and scientific interests, the planned cooperation in space between Europe and the United States carried great political significance for transatlantic relations, he stressed. During a review phase over the next two years, which will cost Germany a total of DM 190 million, precise contracts must be negotiated with Washington, he noted, to ensure that European countries would get a fair return on their investment.

The West Germans expect tough negotiations with the United States, but they want to avoid repeating the unfavourable conditions of the Spacelab project, in which Europeans failed to win much in the way of research benefits and which a German ministry official once described as "the biggest present to the Americans since the Liberty statue".

This time, Mr Riesenhuber said, Western Europe has a proven space programme of its own and could negotiate better terms.

Above all, there would have to be a "real partnership", with a free flow of technological information from the Americans to the Europeans who would also have to be allowed to exploit the technology obtained commercially.

West Germany's decision follows an appeal by President Reagan for



Sir John: not worried

Degree row down under

from Geoff Maslen

MELBOURNE
British academics are not at all protesting at the award of an honorary law degree to Sir John, the University of Queensland's conservative political leader, Sir John Fitzgerald.

Queensland academics have criticized a decision by the law school to award an honorary law degree to Sir John Fitzgerald, a conservative political leader, Sir John Fitzgerald.

Mr Fitzgerald, a senator in the Australian Senate, is a member of the Queensland Liberal Party and has been a member of the Queensland Legislative Assembly.

Mr Fitzgerald said he was not at all protesting at the award of an honorary law degree to Sir John Fitzgerald, a conservative political leader, Sir John Fitzgerald.

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Californians fail to make the grade

from Charlotte Beyers

PALO ALTO
The percentage of graduates from public high schools who meet admission requirements to California state universities, dropped between 1976 and 1983, according to a recent study.

The California Commission on Post-secondary Education, which conducted the survey, noted that the decline matched the reductions in verbal and maths scores on the Scholastic Aptitude Test. The University of California and the state university system consider these criteria for determining students' eligibility.

The survey showed that 13.2 per cent of public high school graduates in the state met 1983 admission requirements, down 14.8 per cent in 1976. The California state university system revealed a similar decline of 35 per cent over 1976.

"We have some work to do" conceded William Honig, state superintendent of public instruction. He said he will emphasize a more academic curriculum for both elementary and high schools.

Mr Honig thinks that in past years educators have not been sufficiently committed to having the admission of minority students as a major goal. Other factors that contributed to the decline, he said, were difficult economic times that decreased family support for higher education.

"Today youngsters are willing to take harder courses. There's a different attitude now. In the 1970s people said 'Don't make an effort. Get away with what you can. Don't go to college'."

A survey found that among the diverse ethnic groups, Asians recorded the highest rate of eligibility followed by whites, hispanics, and blacks. Asians received the highest average scores for the mathematics section of the entrance test, while whites led in the verbal portions.

Asians received tremendous family support for going to college. This helps them a lot, said Mr Honig. Among male and female graduates, 14.2 per cent of the women in California's public high schools met University of California admission standards in 1983, while only 12.6 per cent of men were eligible.

The study also revealed that Asians were the most likely ethnic minority to enrol at the University of California and schools in the state university system, and that Hispanics were the least likely.

In an effort to turn out more qualified students, the California state university system will phase out most remedial English and mathematics courses during the next five years. This will force high schools and community colleges to upgrade their standards.

This year 52 per cent of the state's freshmen needed remedial courses in writing and mathematics. The university hopes to reduce these numbers by 1990 to 12 per cent in writing and 8 per cent in mathematics.

The Main Council takes the view that, even if some amendments to the law are necessary, introducing changes so soon after the original enactment of the law can only be destabilizing.

The underground Solidarity press has come out strongly against the proposed changes. Early drafts of the changes, leaked to the underground press in October, were vehemently denied by the minister, but the official version turned out to be virtually identical.

The changes would replace elected deans and rectors by ministerial nominees, deprive collegiate bodies of a number of rights which would be vested in selected nominees, remove from these bodies representatives of students, junior academics and non-teaching staff, and entitle the minister to suspend or dismiss any lecturer or even whole faculties on political grounds.

The student "self-government committees" at present elected on a personal basis will be remodelled on the basis of existing student and youth organizations, all of which are Party approved.

This will effectively remove from student activity former members of the banned Independent Students' Association (NZA) of the Solidarity era.

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Irish drop plan for student loans

from John Walshe

DUBLIN



Dr FitzGerald: favours loans scheme

Proposals for student loans seem finally to have been abandoned by the Irish coalition government. The idea is still officially "under consideration" but Mrs Gemma Hussey, the education minister, said last week that a loans scheme "does not seem to be a runner in the short term".

It is known that her officials were never enthusiastic about the idea. But they were under pressure from the finance ministry and also, it is believed, from the Taoiseach (prime minister), Dr Garret FitzGerald, who was understood to favour loans as well.

The scheme which was investigated would have involved a reduction in state aid to colleges with correspondingly high tuition fee increases. However the minister said last week that if there were any relation to the unit costs, the charges in some cases would be "staggering".

Instead of loans the government is pressing ahead with plans to increase tuition fees ahead of inflation. It wants the percentage of college income derived from fees to increase over the next few years; at present in the universities between 20 and 25 per cent of income comes from fees.

Only a third of Irish higher education students get their fees paid for through grants or scholarships - in all other cases the students pay the fees which can amount to IR£1,000.

The government proposes to raise fees again by 10.5 per cent next autumn and this has sparked off protests by the Union of Students in Ireland. A series of occupations of government offices took place last week and further protests are planned.

Military jail for professor

from Benny Morris

JERUSALEM

Professor Daniel Amit, the head of the Hebrew University's physics institute, has just completed a two-week stint in an Israeli military prison for refusing to serve in Lebanon.

First Sergeant Amit, a leading figure in the 1970s in the Communist-aligned Hadasah movement and in the committee of Solidarity with Birzeit University, was called up for reserve military duty three weeks ago and was told he was being posted to a base in Lebanon.

He refused to go and after three days of consultations among the country's military brass was sentenced to a fortnight of imprisonment in Military Prison No. Six. Following his release early this week, he was widely interviewed in the Israeli press.

Professor Amit is one of about 150 Israelis who have refused to serve in Lebanon and have been jailed, some of them repeatedly. Many other Israelis have avoided reserve duty in Lebanon on medical or other pretexts, some have simply been released from service without jail by sympathetic commanders.

Professor Amit is now a leading figure in the Israeli Civil Rights Association, which tries to make sure that the civil rights of Arabs in the occupied territories are respected by the Israeli government. He has formally decided to withdraw from Lebanon back to the international frontier, the need to refuse service in Lebanon has been eliminated.

A leading left-wing activist in Israeli academia for the past two decades, Professor Amit backed off from his communist affiliations during the early 1980s.

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Finns and Russians celebrate 30-year 'special relationship'

from Donald Fields

HELSINKI

Thirtieth anniversary celebrations of an inter-governmental agreement on scientific and cultural cooperation has prompted members of the Finnish and Soviet Academies to wax eloquent about their special relationship.

The agreement is one of a plethora signed in the wake of the 1948 Friendship Treaty that defined Finland's strategic importance to the USSR while allowing the Finns to remain non-aligned and to preserve their capitalist system. Bilateral dealings in education and research fit neatly into the institutionalized framework, and each side professes to a spirit of balanced give and take and equal benefit.

Professor Kai Otto Donner, chairman of the central board of the Academy of Finland, said that 200 to 300 scientists of either country travelled to undertake research in the other every year. In money terms, the partners contributed equally to the scheme.

Under a separate accord between the two academies signed in 1971, the focus had fallen on such aspects of regional cooperation as geological studies of the Baltic and Finnoscandian Shield and biological investigations into the distribution of Eurasian fauna and flora.

Soviet researchers were happy to gain access to libraries and literature in Finland, and they had cooperated with the Finns in excellent theoretical work on low temperature physics. Unfamiliarity with each others' languages was only a trifling obstacle because many of the key documents were in English.

"Travel and bureaucracy have been problems, but things are becoming gradually easier," Professor Donner said. "Though joint projects have to be approved by the respective academies, personal contact makes scientists want to pursue studies among themselves. In this respect the Russians are learning from us and cutting out the red tape - it could be part of their efficiency and productivity drive."

Scientists covered by the scheme appear unlikely to be politically compromised by the enormous gap in the way each country functions. This contrasts, for instance, with the dialectical contortions indulged in at international conferences by Finnish psychiatrists whenever motions critical of Soviet psychiatric abuses are tabled.

Just how sensitive this issue became in foreign policy terms before the USSR left the World Psychiatric Association two years ago is depressingly described by the Finnish artist and writer Carl-Gustav Liljus, a "dissident" belonging to the country's 6 per cent Swedish language minority, in a new collection of political essays entitled "Maki och Mardor" (Power and Nightmares).

Within the respective academies' remit there is little danger of scientific exchanges harmful to either signatory state - partly because Finland's military strength is strictly circumscribed by international treaty. There is a theoretical possibility that Finnish researchers who have worked in the West could pass on strategically sensitive information, but clearly the onus on preventing technology transfers hinged upon by Washington is on firms rather than individual scientists.

"Nothing is to be gained by restricting the availability of basic research data," is Professor Donner's scientific assessment. "All it does is to delay things in the Soviet Union - but the developments eventually come about anyway". Inter-academy working groups extend well beyond pure and applied science to history, philology and folklore.

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CRAC

Felicity Jones

Patrick McQuaid on the bogus certificate investigation which has scandalized America

How I 'graduated' for \$39.35 plus postage

The Federal Bureau of Investigation has identified 12 Britons as clients of a mail order diploma service which supplied fraudulent degrees, certificates and licenses to nearly 2,500 people during the past two years.

The sentencing on February 14 of Mr. Dennis Everett Gunter, mastermind of the counterfeit enterprise, caps the latest and largest in a series of dramatic events orchestrated by the justice ministry in an undercover probe called "Operation DipScam". In December, Mr. Gunter pleaded guilty to two charges of mail and wire fraud before the federal district court in Oregon, where the business was based.

The case marks the first for the FBI involving forged diplomas from actual colleges and universities. Earlier investigations centred on fictitious schools issuing their own degrees and academic transcripts.

Among Mr. Gunter's offerings were certificates from the Institution of Mechanical Engineers and the Department of Education and Science. Most British clients purchased forged diplomas from American universities, according to the FBI. Degrees from



WORLDWIDE

Boston University, Columbia University and several colleges in California were mailed to addresses in London, Twickenham, Falmouth, King's Norton and Liverpool. In many instances, individuals purchased as many as three diplomas from different colleges.

The names of all foreign clients - totalling 75 - are to be forwarded to appropriate authorities via an FBI legal attaché at each US embassy. Most diplomas sent outside the States went to the Kingdom of Saudi Arabia, followed by Canada and the UK.

At home, the FBI this month began investigations to determine what American clients did with their purchased diplomas. The Government is first checking with the registrars at some 300 colleges and universities to see if those people did, in fact, attend and graduate. State licensing agencies

will then be contacted to inquire if doctors, lawyers and other professionals are holding false degrees.

Last June, FBI Special Agent Otto Allen Ezell took out search warrants and impounded the property of Mr. Gunter's firm, Alumni Arts. Earlier, he and other agents had bought forged degrees from Alumni Arts and negotiated a deal in which Mr. Ezell, posing as an enterprising accountant, would recruit clientele from the East Coast.

The investigation was initiated a year ago when Mr. Ezell learned that this correspondent had obtained a counterfeit Harvard doctorate from

Alumni Arts while researching an article on diploma mills for an American magazine.

Diplomas, printing plates and photographic negatives from more than 300 institutions were seized in the FBI raid. Mr. Gunter had listed in his catalogue as "Schools Available" some of the nation's leading research universities, including Stanford, Cornell, Johns Hopkins, New York, Reaseley Polytechnic, Emory, North-western, Temple, Texas A and M, Tulane and Wisconsin universities as well as the University of Cape Town, the American University of Beirut,

and the University of Havana. A Cuban diploma was sent to an address in Hong Kong, according to Mr. Ezell.

Mr. Gunter had also forged diplomas from several fictitious schools, among them Sands University, one of diploma mills Mr. Ezell and his colleagues had already shut down during the course of the four year Operation DipScam. Agent Ezell had acquired a fictitious Master of Business Administration, flawless course transcripts and letters of reference. The copies of that outfit, Mr. Wilbur Corbin, last summer pleaded guilty in court to count indictment before he was arrested.

The FBI is now trying to ascertain whether Mr. Gunter was working out other diploma mills, or if he had been duped by some of his own customers.

Mr. Gunter solicited customers through advertisements placed in magazines, ranging from *Easy Money* to *Success* and *Psychology Today*. He also used a direct mail campaign around readership of his "very stupidly" too grand to consider a return to education. So he resumed his training at the Hotel Martinez in Cannes before a return to the raffish London of the late 1940s and the catering side of the Arts Theatre.

Three years later, in 1952, he opened the Royal Court Theatre Club over the theatre of the same name in Sloane Square. Although he modestly disclaimed a great commitment to the theatre ("my theatrical interest was always through pots and pickles rather than tragedy or comedy") the club was the first to employ a galaxy of household names - Jonathan Miller, Dudley Moore, David Frost, Rolf Harris, Fenella Fielding and many others.

If the demands of running a successful night club for 10 years were not enough, in 1956 he branched out into journalism, writing on sport for *The Observer*, the instigation of his friend Chris Brasher.

But writing was essentially a sideline until the lease on the club expired. Then he worked for Tim Beaumont, owner of *Time and Tide* and a mainstay of the Liberal Party, as coeditor before contributing columns to a number of newspapers including *The Observer* and *Daily Telegraph* magazines. *The Sun* in its pre-tablet days, *Reynolds News* and for two years as an official city column for the current Chancellor of the Exchequer, Nigel Lawson, at the *Sunday Telegraph*.

In parallel was a decade of television and radio including his own food programmes and a vast number of chat shows. In this period too was the award-winning television pet food commercial which still dogs his reputation and was a considerable contributing factor to the raised eyebrows when he stood for Parliament in a by-election for the Ely constituency in Cambridgeshire in July 1973.

"It was the time of the Rochdale revival, 11 years after Orpington, and the nation was looking for alternatives," he says. "I had always been interested in the Liberal Party. I asked my father why he was a Liberal and he said 'They may not have a policy but they are nicer people.' In East Anglia it was very common to share being a Liberal with being a Liberal."

The period was one of great optimism for the Liberals who detected a rising tide of popular support, having increased their Parliamentary representation from 6 to 11 between the 1970 general election and the 1974 dissolution.

Under Jeremy Thorpe, this party was once more a potential political force in the land, very much holding the fate of the minority Labour Gov-

The Alliance may have considerable support among academics but remarkably neither the Liberal nor Social Democratic Party education spokesmen ever entered higher - or even further - education.

Mr. Clement Freud, a familiar public face even before he entered Parliament more than 10 years ago, left school at 16 to learn the arts of catering in the highflying but still steamy Dorchester Hotel kitchens.

His opposite number at the SDP, Mr. Michael Hancock, a relative newcomer both to the House of Commons and the education portfolio, went straight from school into an engineering workshop in Portsmouth at 15.

Neither believes they are at a disadvantage when confronting the issues of higher education, any more than their political opponents on left and right are necessarily disqualified because they have no direct experience of an inner city primary school or a hard-pressed northern polytechnic.

In a deviation from acknowledged practice, Mr. Freud makes no reference to his educational background in his Who's Who entry. For the record it was a progression from nanny to village school; Dartington Hall as a nine-year-old boarder; a London preparatory school and finally public school, evacuated from the city because of the war. "It is almost totally irrelevant," Mr. Freud says.

Ideas of university entrance in those grim times seemed equally irrelevant. "At 17½ you joined up. Unless you read medicine or law, universities would only take you for a term before you went into the army."

Asked about the Dorchester decision, he gives that familiar smile and says: "Simply a father, concerned that his gourmandizing would not be satiated under rationing, putting a tame man in the kitchens of the Dorchester."

War service in the Royal Ulster Rifles was followed by a period as an liaison officer at Nuremberg. The luxury of a batman to polish his Sam Browne and a driver to chauffeur him around readership of his "very stupidly" too grand to consider a return to education. So he resumed his training at the Hotel Martinez in Cannes before a return to the raffish London of the late 1940s and the catering side of the Arts Theatre.

Three years later, in 1952, he opened the Royal Court Theatre Club over the theatre of the same name in Sloane Square. Although he modestly disclaimed a great commitment to the theatre ("my theatrical interest was always through pots and pickles rather than tragedy or comedy") the club was the first to employ a galaxy of household names - Jonathan Miller, Dudley Moore, David Frost, Rolf Harris, Fenella Fielding and many others.

If the demands of running a successful night club for 10 years were not enough, in 1956 he branched out into journalism, writing on sport for *The Observer*, the instigation of his friend Chris Brasher.

But writing was essentially a sideline until the lease on the club expired. Then he worked for Tim Beaumont, owner of *Time and Tide* and a mainstay of the Liberal Party, as coeditor before contributing columns to a number of newspapers including *The Observer* and *Daily Telegraph* magazines. *The Sun* in its pre-tablet days, *Reynolds News* and for two years as an official city column for the current Chancellor of the Exchequer, Nigel Lawson, at the *Sunday Telegraph*.

In parallel was a decade of television and radio including his own food programmes and a vast number of chat shows. In this period too was the award-winning television pet food commercial which still dogs his reputation and was a considerable contributing factor to the raised eyebrows when he stood for Parliament in a by-election for the Ely constituency in Cambridgeshire in July 1973.

"It was the time of the Rochdale revival, 11 years after Orpington, and the nation was looking for alternatives," he says. "I had always been interested in the Liberal Party. I asked my father why he was a Liberal and he said 'They may not have a policy but they are nicer people.' In East Anglia it was very common to share being a Liberal with being a Liberal."

The period was one of great optimism for the Liberals who detected a rising tide of popular support, having increased their Parliamentary representation from 6 to 11 between the 1970 general election and the 1974 dissolution.

Under Jeremy Thorpe, this party was once more a potential political force in the land, very much holding the fate of the minority Labour Gov-

Acting on double strength



David Jobbins talks to Alliance education spokesmen Clement Freud and Michael Hancock

as soon as he entered the House he became the party's education spokesman, confronting Mrs Thatcher during her period as Secretary of State for Education. He found his dislike for her politics matched by admiration for her intellect. The admiration remains, even if the political antagonism has been magnified by her Government's period in power. "There is a very thin line between resolution and pugnaciousness: I admire resolution."

Particularly, he singles out, as the first Secretary of State for Education to become prime minister, her failure to promote education in the wider fields of public policy, the Government's encouragement for the private sector, the tinkering with assisted places and the voucher system.

But he reserves his greatest scorn for the treatment meted out to the Open University, an issue he has taken strongly to heart because of the institution's role as the epitome of Liberal education policy.

Attacking present policies as "lunacy" he says: "One felt and heard that Mrs Thatcher felt she had come to power too late to stop the Open University." But he feels that the OU is being made to suffer by bearing a disproportionately heavy burden under equally of misery strategies that fail to take account of the way it functions and the purposes in society that it serves.

During the first general election campaign of 1974, he was nominated to stand as rector of Dundee University, his election announced the evening before he held on to his Parliamentary seat. He was reelected again in 1977, this time fighting off challenges from actress Fiona Richmond and renegade former CIA agent Philip Agee.

His remained education spokesman until 1977, when the job was taken over by Alan Beith also chief whip of the party, and resumed the brief once more in 1983.

One of his consuming regrets of the Callaghan period was that he was unable to carry through his Private Member's Bill to revise Britain's creaking official secrets legislation and find a better formula for disclosure of information.

The Bill had gone through its committee stage in the Commons and was due for its report stage on the floor of the House on the Friday after the Callaghan government fell by one vote on the Thursday.

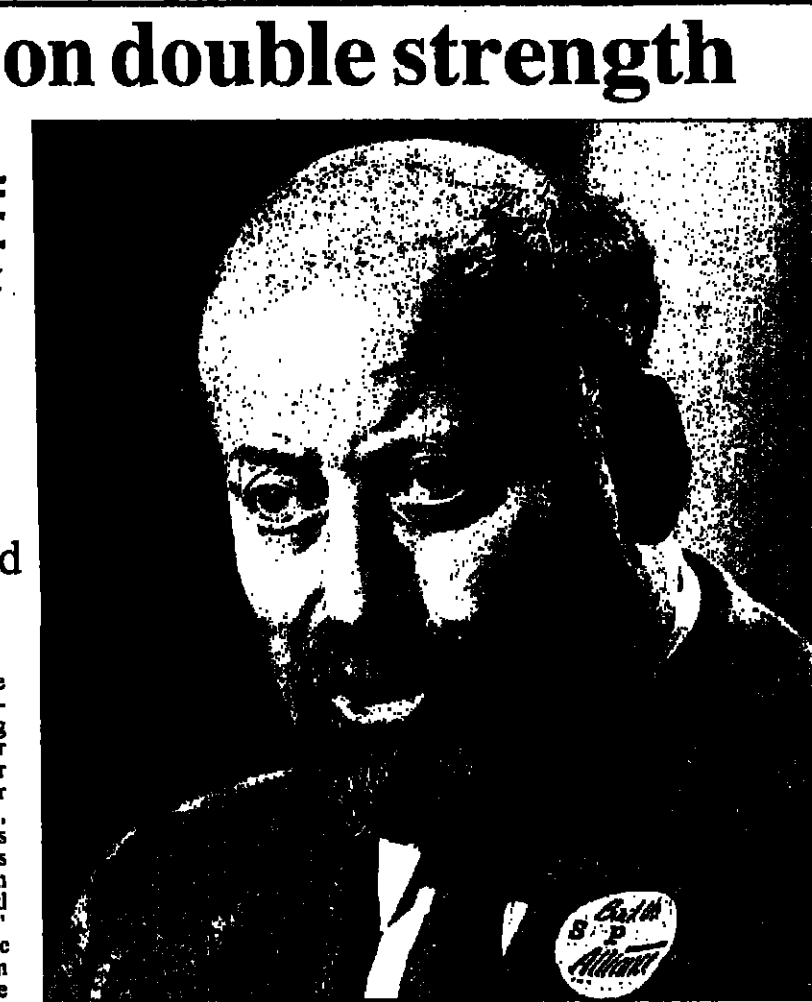
"I was with David Alton at the Edge Hill by-election in March 1979 and we were shaking hands with people at one of the pools firms when I was asked if I could take a call from Number 10 in a secure room."

"It was Callaghan's office saying that if the Government was defeated the Bill would fall, and if I undertook to miss the train from Liverpool I could have my Bill. It caused me to take an earlier train... It seemed like a rotten thing to do to someone. It didn't take me many seconds to say 'So what?'"

So the Government fell by one vote and the Bill was lost, although reintroduction of a similar measure would have a high priority on any future Alliance programme.

Since resuming responsibility for education, Mr. Freud has been a prominent Parliamentary critic of Government policies, with some observers suggesting he has helped put the Labour opposition in the shade over the issue.

But he has eschewed a self-indulgent temptation to combine criticism with commitment to restore funding levels to their former levels without a realisation of what education is all



Clement Freud: always been interested in the Liberal Party



Michael Hancock: freely concedes he is no expert

about. "There is certainly a commitment as to priorities, and an Alliance government would give substantially greater priority to education than to fortress Falklands or Trident," he says. "But there are no hostages to fortune on restoring funding, automatically reintroducing tenure if ministers legislate to end it."

He believes that the decision to raise the school leaving age may have contributed to some of the problems now apparent in the schools - indiscipline, poor performance, low teacher morale. He would be happy for people to be free to leave school as young as 14 - if as a corollary local authorities had to provide opportunities for them to return to education through the remainder of the adult life.

This flexibility is at the root of the Liberal education policy - and it demands a response from universities and colleges who would have to adapt to accommodate an increased proportion of mature entrants often from the traditionally disadvantaged groups.

He regards the case for student loans as "not proven," and the party has launched its own inquiry into student financial support to see if there are alternatives to the present creaking structure, which he says, according to Mr. Freud, has been used less as a grants than an incomes policy.

As for the Liberal Party's education policy, he says: "I am open to ideas and suggestions from people in education whatever their political beliefs and I am trying to pursue an interest in education from the bottom up. I am not trying to kid anyone. I know all the answers or even the rights and wrongs of many issues but I have a good basis of common sense and want to ensure the system is right for my kids and everybody else's."

He feels that people in education have failed to make their case against cuts with the public and that they must be mobilized. "What is needed is a reeducation of the population on the importance of education - both at school and further education - to the stability and further growth of our society."

He regards the Alliance's commitment to education as an acid test of his undoubted loyalty to it, although sharing a reluctance to give open-ended commitments to pressure groups. In common with the Liberals, the SDP shares the view that something must be done about the dominance of the 18-year-old age group in further and higher education.

Mr. Hancock confesses to considerable admiration for Clement Freud, and says that they will be working together to produce a series of joint policy statements. "If an happy to be

appointed spokesman, he was the victor in the Portsmouth South by-election last year.

Born into a Service family, his education was "here, there and everywhere," until Portsmouth, where he completed his education and went into one of the engineering firms that then proliferated in the city.

His roots are firmly in the Labour Party and the trade union movement, active in politics from an early age and an Associated Union of Engineering Workers shop steward at 21. He became a city councillor in 1971 and following local government reorganization also became a Hampshire county councillor. For more than five years he was leader of the Labour group on the county council.

But growing anxiety over developments within his party locally and nationally began to have its effect. "I left the Labour Party in the middle of 1981, largely because of the lack of tolerance and understanding that there was more than one point of view. I saw friends and colleagues torn limb from limb and realized there was no future for me in the party. I was heart-broken."

Despite the wrench, his departure was a liberating influence on his political thinking. "I could not believe the transformation which came over me - it was if a real weight had been lifted from my shoulders."

Not prepared to sever his links with the city, he stood unsuccessfully in the 1983 general election for the Portsmouth South constituency of Mr. Bonner Pink, who unexpectedly died last year.

Success in the ensuing by-election he attributes to a series of errors by the Conservatives who fielded a Thatcherite candidate in a city which despite its location in the soft south shares many of the problems of the de-industrialized north.

Mr. Hancock freely concedes he is no expert on education, although he has a direct family interest with two children going through the system.

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ed by people who know more about the issues, but as I develop in the subject, I intend to make as much of the running as he does," he says.

As a committed local government politician, he sees scope for increased partnership not only between public sector institutions and their local authorities but the universities as well. "I would like to see the polytechnics turned into universities. It is something which should be looked to with real enthusiasm."

He regards his city's own polytechnic as a university in all but name and regrets any tendency for it to be less highly regarded because it lacks that exclusive cachet. "Maybe we should abolish both titles and find a new name," he says.

The great attraction of the SDP to academics has perhaps been its lack of "taint," its freedom from the evils which have befallen the other main parties. With its partner in the Alliance, there is now no lack of policy and the key factor remains the chance of carrying them into effect.

The coming months will test whether Mr. Freud and Mr. Hancock can together weave the various strands of educational policy into a whole which will command the continued support of those academics who have valued their colours to this political mast.

Mr. Hancock, the SDP's spokesman not only on education but training and employment, seems content to play second string to his more experienced counterpart for the moment.

Aged 38 and only recently

Difficulty in tracking down the forgery factories

The extent of the spurious credentials business has taken many in government and academic circles by surprise. The first concentrated effort by US authorities to crack down on the industry came during the Eisenhower Administration. After a year's work, lawyers for what was then the Department of Health, Education and Welfare could point the finger only at a handful of diploma mills. The problem was that few states had laws on academic fraud and among those that did enforcement was lax.

So far there is no federal law either, but as the magnitude of the problem comes into sharper focus, some members of Congress are urging the Government to adopt remedial legislation.

This is why the Government has based its prosecutions on postal and wire deception and on conspiracy charges. In addition to Operation DipScam, independent and joint initiatives have been carried out by the US Postal Inspection Service, the Department of Health and Human Services, the General Accounting Office, the Department of Education, the Office of the Attorney General in at least 15 States and the Royal Canadian Mounted Police. Intelligence agencies of several other coun-

tries have also cooperated.

At a Congressional hearing on fraudulent medical degrees in December the House Select Committee on Aging reviewed evidence suggesting that as many as 10,000 practising physicians in the United States have bogus MDs. In addition to the 44 diploma mills already shut down by the FBI, more than 400 suspect colleges have been identified by a California consultant.

When undercover postal authorities arrested an expediter of fraudulent MDs in Washington in August 1983, they found they had also opened a Pandora's Box. Mr. Pedro de Mesones testified that in the three years he was in business, he brokered

degrees for 165 clients and amassed roughly \$1.5 million.

Mr. de Mesones also provided his clients with forged academic records from foreign medical schools to round out their educational background and arranged for placements in American medical schools as well.

Mr. de Mesones is now serving a three-year sentence. In an effort to reduce his sentence he has turned over the names of his competitors - at least a dozen.

The Congressional committee also examined evidence that the quality of foreign medical education at a dozen schools catering for Americans was substandard. Many of these schools lacked rudimentary equipment such as x-ray machines, cadavers or a library.

The committee also heard that these activities are supported by federal funds in the Medicare and Medicaid payments.

In 1980, the General Accounting Office reviewed the operation of 44 foreign medical schools annually enrolling thousands of Americans and decided that none of them offered a medical education comparable to that available in the United States. They found deficiencies in admissions requirements, curriculum, faculty and clinical training.

Enrollment in American medical schools has more than doubled during the past 20 years. Only about a third of the applicant pool was accepted during the last decade. During the 1960s, that figure has already increased to about a half. For the remainder, foreign schools are often the last resort and about 13,000 Americans now exercise that option each year.

Of all licensed physicians in the United States, 21 per cent are believed to be foreign medical graduates. Over a third of all foreign-educated doctors studied in Central and South America.

He next enrolled in graduate and further education programmes for practising physicians at Columbia and New York universities and was soon working in two New York hospitals. By 1981 he had applied for a medical fellowship at the National Institutes of Health. He was assigned to the Baltimore Gerontological Centre of the National Institute on Aging, earning \$30,000 a year. He was dismissed after six months but became a staff anaesthetist at the Walter Army Hospital.

There he participated in some 70 operations before his amazing career came to a close when, he administered anaesthesia during a simple routine operation. The patient's heart stopped and Mr. Asante did not notice for four minutes. Army neurologists have testified that the patient will remain a vegetable for the rest of his life.

Asante is now serving 12 years for aggravated assault.

On the surface, the requirements for foreign medical school graduates are expected to meet in order to apply for license or to practice in the United States, appear stringent. Two years of study in basic medical sciences, participation in clinical training programmes, plus postgraduate residency at an American teaching hospital are needed.

Applicants must also pass two exams - the certification test of the Educational Commission for Foreign Medical Graduates and the Federation Licensing Examination, which is administered by the state in which they wish to be licensed.

In July 1983, some 17,000 students took the first of these exams. The Government found that between 3,000 and 4,000 had seen the answers in advance. The test had been stolen and initially sold for \$50,000. A chain letter process began and ultimately copies were sold for as little as \$50.

The concept of open admissions has taken on a whole new meaning since any high school drop-out with as little as \$39.35 and a 20-cent postage stamp could acquire a PhD from Alumni Arts. Custom orders, such as Harvard or the DES certificate, cost an extra \$25.

Many of those found to have phoney medical degrees have been cited from educational loans, ranging from \$5,000 to \$25,000, according to the General Accounting Office.

The House Select Committee on Aging has been asked by its chair, Mr. Claude Pepper of Florida, to conduct a number of recommendations. Among them would be the elimination of all student loans and Veterans Administration benefits for foreign medical school students and a new law making it a federal felony to use health profession credentials to obtain any training at facilities partially reimbursed by the government.

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SCOTLAND'S GREAT DEBATE

Scottish higher education is at the cross roads, with the Scottish Tertiary Education Advisory Council set to review how best it can meet the demands placed on it, as it heads into the twenty-first century.

A four-page report, first published in *The Times Higher Education Supplement* on December 14, 1984 sets the scene for Scotland's Great Debate, looking at the present system, the proposals for reform made to STERC, previous attempts to plan higher education, and the way ahead.

Reprints of this feature are available, price 30p from Lesley Griffiths, The Times Supplements, Priory House, St John's Lane, London EC1M 4BX. Please make cheques/postal orders payable to The Times Higher Education Supplement.

Twenty years ago in the New Year of 1965 Anthony Crosland became Secretary of State for Education and Science and immediately began, with Toby Weaver, the formulation of the policy to establish the polytechnics. Crosland did not know the field well. But he had been in 1962 a signatory of a Labour Party document - the Taylor Report *Years of Crisis* - which had recommended that some 50 new universities should be created by amalgamating teachers training colleges with regional technical colleges. Crosland initiated a policy in 1965 that effectively implemented it.

In effect we now have, in the polytechnics, the Scottish Central Institutions and the leading colleges of higher education, some 50 additional universities, each more substantial than were most of the British universities of 1962. Perhaps for this to happen it was necessary for these institutions not to be labelled "universities", but this is now in question. Where are the polytechnics to go next?

Harold Macmillan committed us to the expansion of the universities in a conservative mood by three key decisions: the introduction of the mandatory grant system for full time degree courses, the creation of the "new universities" remote from industrial centres and the appointment of the Robbins Committee. These were conservative in that they reinforced the preoccupation of the universities with the provision of full time degree courses for 18-year-olds, the insulation of the universities from the community at large and the existing thinking about the place of the university in research and the place of research in the university. For a generation Macmillan inhibited a reconsideration of these matters within the university sector and only recently have they returned to the agenda.

Main preoccupation has been imitation

The decision of Wilson's Government in 1966, albeit halfhearted in its implementation, to create the polytechnics and the Open University, kept these issues alive in British higher education for 20 years. For it has been in the polytechnics and the Open University - that short-cycle higher education, part-time higher education, higher education for mature students, home-based higher education and recurrent higher education have developed and expanded. And it is in the polytechnics that the place of research has been and remains under constant debate. But this must not be overstated. The most impressive achievement of the polytechnics has been their sheer growth in size and numbers, but their main preoccupation has been with imitating the universities.

Their distinctive contributions to higher education are often incidental and marginal and are prompted by little strategic thought or awareness. No one has seriously attempted a

Celebrating a coming of age

Twenty years ago Anthony Crosland, the midwife if not the parent of the polytechnics, became Secretary of State for Education and Science. In a series of short articles ERIC ROBINSON, who himself became the polytechnics' first prophet with his influential book *The New Polytechnics*, examines their prospects for the late 1980s.

definition of the distinctive character and identity of the polytechnics or has found for them a credible role in a rapidly changing higher education pattern, for rapidly changing it will be in the next five years.

One of the most prevalent misconceptions of the day is that Mrs Thatcher's Government is a conservative one. It is perhaps the most radical administration of this century, and it will demand yet more radical changes of the academic world. Its review of the students' grant system will have far reaching consequences for the system. Anyone who believes the Manpower Services Commission's imperialism will stop at the further education level would have as easily believed that Hitler would be satisfied with the return of the Saarland.

Our system of higher education is ramshackle and its priorities are indefensible. If the academic centre and left respond to the challenge of the radical right with negative conservatism they will inevitably lose. If the polytechnics seek refuge, at this of all times, in becoming universities of an outdated kind, as many of them are now inclined to, they invite disaster. The names of Aston, Salford and Bradford are written on a wall that has space for at least 30 more. The established universities could ask of no better protection than the availability of new recruits to put on the firing line in the battle to come.

If there is strength in numbers the polytechnics have never been stronger. They should now decide where they are going before it is decided for them. They must avoid simply reverting to type because if one thing is certain it is that this country does not need 30 more red brick universities of mid-century vintage.

They cannot remain as they are. They are needlessly shackled by control machinery created by a succession of short term expedients five, 10 and 20 years ago, much of it less than satisfactory when created and now often irrelevant or obsolete. The malaise

nance of rules, regulations and procedures of control that are improper, outdated, unnecessary, irrelevant and ineffective has two debilitating consequences. It degrades and corrupts. It continuously insults and humiliates those it attempts to control, and it brings rules, regulations and procedures themselves into disrepute.

Every nonsense... generates nonsense

Every local authority treasurer who tries improperly to impose restrictions on a polytechnic encourages impropriety and malpractice within it. Every Council for National Academic Awards officer who tries to regulate curriculum encourages academic irresponsibility. Every auditor or officer counting hours on timetables encourages over teaching and fictitious time-keeping. Every nonsense perpetrated by the National Advisory Body generates nonsense within the institutions.

We have to escape from the thinking of 1965 about the polytechnics. Twenty years ago most of the British universities were very different from the regional technical colleges. The universities with few exceptions had at least 1,000 students and many of them had more than 2,000; the colleges counted their students in hundreds. Most of the universities had at least 10 years experience of planning their own degrees. Most of the technical colleges were only starting to design their own courses.

In addition to Oxford, Cambridge and London there were three or four English universities with more than 5,000 students. It was of course possible that some of the polytechnics would soon have more than 1,000 students but Crosland planned that none would become universities for at least 10 years. Nobody anticipated the day when the polytechnics would

attain their present size and stature.

In 1985 most of the polytechnics have more than 5,000 full-time equivalent students and are more than twice the size of most of the universities of 1965. They have far more experience in the design and operation of degree courses and postgraduate work than had most of the universities of 1965. A stranger to the British higher education system would have difficulty on a 1985 tour of campuses in distinguishing between a university and a polytechnic.

The polytechnics have outgrown cadet status. Most polytechnics are now as big as most UK universities. When a brownie outgrows her uniform something has to be done, if only for the sake of decency.

Fundamental to the idea of creating the polytechnics was the objective of concentrating public sector higher education in a limited number of institutions, each of which was to have degree courses and awarding their own degrees. Local authority control was to be maintained because this was easy and there was no apparent alternative.

This posed the problem of how to promote higher education controlled by some authorities and to frustrate higher education development by other authorities. No intelligent approach to the solution of this problem has ever been attempted. In consequence the policy of concentration has had limited success and the power of local authorities has been steadily reduced.

The creation of the NAB has not solved the problem. Indeed it has led to some dispersion of higher education resource. Generally the local authorities seem unaware that the reality and legitimacy of their control of the polytechnics has been effectively undermined by the Department of Education and Science and their own ineptitude. The polytechnics seem equally unaware of the political danger of losing the local authority connection with no plausible replacement; for where are the friends and patrons of the polytechnics?

Who really controls the polytechnics

It is time for the polytechnics to take stock: to lift their eyes just a little beyond the immediate practicalities; to consider what they are about, where their enemies and their friends are and where they want to go; to examine their connection with the CNAU and the Business and Technician Education Council, with the local authorities and the DES with the universities, colleges and schools.

The author is director of Lancashire Polytechnic.

Next week: the geography of polytechnics.



Eric Robinson: "Our system of higher education is ramshackle"

Britain's Beginnings I: Richard Bradley looks at the evolution of British prehistoric society

A changing landscape

When Claudius invaded Britain in AD 43, he arrived during a period of unparalleled social change. He came into contact with a series of large tribal federations, ruled by dynasties who issued their own coins and engaged in a thriving export trade with the Continent. A little less than a century earlier, Caesar had observed a very different picture. Society had been far more fragmented, with a whole series of much smaller tribes engaged in endemic warfare. They seemed to lack established institutions and their leaders were selected on the basis of military ability rather than birth.

Pre-Roman society had considerable potential for change, and never more than during the period in which it first came into contact with the Roman world. Behind that period, however, lay many generations during which the inhabitants of Britain had no real contact with state societies and were all too rarely mentioned by classical writers. That much longer period must be investigated by archaeology or not at all. How far have archaeologists met this challenge? How did prehistoric Britain achieve the social complexity first described by Roman writers?

Archaeological methods are indirect and depend on contemporary observations of ancient material, the great majority of which has survived entirely by accident. The archaeological changes of glossing over this difficulty by projecting the processes observed in the historical period back onto undocumented societies, but these analogies usually fail since the societies concerned were different in kind. It is still less satisfactory to impose our own division of experience onto our prehistoric ancestors, and there have been too many pronouncements already on the limits of inference in archaeology.

The truth is that many of the deficiencies of its raw material are offset by its very long time scale. Prehistorians have the opportunity to trace extremely long sequences of change, but in doing so they must proceed by model building, as well as imagination. Such models ought to use sequence as their key element, for it is this long timescale which distinguishes archaeology from social anthropology, the source of so many of its ideas.

Prehistoric Britain was never a state society, although it may have been developing in that direction by the time of the Roman Conquest. It seems to have lacked major urban centres - although some authorities would deny this - and writing had only been introduced under Roman influence. It is still uncertain whether it even possessed a market economy. Before that period, there are very few signs of large scale political units.

In the absence of complex political arrangements, three elements may have been especially important to the evolution of prehistoric society in Britain: monument building, conspicuous consumption and warfare. The very nature of these three elements introduces the importance of ideology in social relations and also that of prestige. Without a shared view of the world, involving the relations of the living and the supernatural, sanctions would be hard to maintain and there might be little scope for the emergence of a secular power base. Without the continual quest for prestige, it would be difficult to attract followers and impossible to engage in warfare.

The significance of large monuments should never be underestimated, just because they are so conspicuous today. They were meant to last and to impress. They represent enormous amounts of social labour for preindustrial society and may very well have been their greatest achievement, no matter how little we know about the economy which underwrote their construction. A few figures will give some idea of their sheer scale.

The barrow and ditch around the great stone circle at Avebury would have taken about 500,000 worker hours to build, a little more than the massive enclosure known as the Dorset Cursus. The major stone-phase of Stonehenge required about one and three quarters million worker hours and the tomb of Newgrange in the Boyne Valley needed nearly twice that effort. The greatest of all the earthwork monuments was probably Silbury Hill, the largest artificial mound in Europe



before the Industrial Revolution. This needed a labour input of four million worker hours.

Such constructions left a lasting mark on the landscape and were meant to do so. Whatever happened in later periods had to take these features into account, whether fresh elements were added, rival monuments of even greater splendour were built or the original structures were desecrated and destroyed. At any event no one could take these monuments for granted since they embodied on a massive scale quite specific views of the world.

Archaeologists have been slow to make use of the most distinctive characteristics of large monuments. First of all, monument building could be one way of effecting radical change and of enshrining political authority in an apparently permanent form. Very often monument building brought together the different forces in society in the face of one enormous undertaking, just as the finished structure embodied a vision of the world beyond any possibility of change. While later generations might feel free to accept or reject this version of reality, the presence of large monuments tended to constrain later developments in the same area.

At the same time monuments were not created cynically as an exercise of power for its own sake, however much their creation assisted the process of social change. Their building must have involved the assertion of quite specific ideologies, however rarely we can interpret them today. One striking feature is the way in which such constraints became rooted in nature through incorporating such elements as astronomical alignments. These alignments were not the monuments themselves seem timeless. They often represent the exercise of authority whose precise character is left undetermined. When purely secular constructions took the place of these ceremonial monuments, they rarely attained the same proportions.

There are perhaps two links between building and conspicuous consumption, since some of the largest ceremonial centres, like Durrington Walls in Wiltshire, provide evidence of large scale feasting and contain intentional deposits of elaborate artefacts. Both forms of consumption have a much wider significance, but, generally speaking, they have one feature in common. In pre-capitalist society it seems likely that one role of large scale consumption was the creation of indebtedness. By providing lavish gifts or enormous feasts, individuals or whole communities were creating an obligation to reciprocate, and if this could not be met on a suitable scale, they could assert their own superiority over their rivals. Such conspicuous success might lead in turn to strategic alliances and the recruitment of supporters implying a close link between the dominant elements in society and otherworldly powers.

If major monuments were built chiefly at times of drastic social change, the main periods which saw conspicuous consumption are hardly less dramatic. The main evidence of large scale feasting is almost entirely confined to phases which saw changes in other parts of the archaeological record. In the same way, the consumption of exotic and often finely made artefacts took place during very much the same periods and resulted in the deposition of this material not in "settlement" sites but in "ritual" or votive deposits, the latter in major

riters like the Thames. Such objects may well have enjoyed a restricted circulation among the living, but they differ from our own conception of wealth in one important way.

In western society, unused wealth can be invested, but this would not have been possible during British prehistory, when the medium of social relations seems to have been prestige. Gifts could be used to create debt, but debts could always be fulfilled, with the result that imbalances created on one occasion could always be redressed on another. The one alternative seems to have been by withdrawing fine objects from circulation and using them as grave goods or votive offerings. It is due to these processes that they survive for us to study them today. In particular, votive offerings break the cycle of gift giving and since they are essentially one way gifts they also deplete the supply of precious objects in circulation.

Such offerings took two forms. In Britain, grave goods normally occur beneath burial mounds and are associated with the remains of a single individual. Normally they constitute one set of personal equipment. Votive offerings, however, need not have been funerary deposits and may have involved larger quantities of gifts and the participation of more people. Most of these took place in rivers, lakes or bogs. This practice is most common during periods in which there is evidence of instability in society and often involved the deliberate destruction of weaponry, including parade armour which could not have been used.

This process took place at the same time as the growth of defended sites and some of the more plausible evidence of warfare, but the two are generally found in different parts of the country, as if the consumption of fine weaponry had been a form of surrogate conflict, held back in check by supernatural sanctions. The best evidence for periods of violence of course comes from human pathology rather than the building of defended sites, which like all large monuments, could play more than one role at once. In the Iron Age of the Yorkshire Wolds, for example, we find burials with weapons and skeletons with sword wounds but so called hill forts are largely or entirely absent.

It seems likely that the most convincing evidence for overt conflict is found when the sanctions which maintained the running of society were breaking down. The first phase of unrest is seen when the building of large monuments in the late fourth millennium BC no longer contained the tension and complexity of society. The second phase took place when the provision of rich burials with grave goods was coming to an end, while the third and most drastic period followed the collapse of the systems of competitive consumption described above. This took place towards the middle of the first millennium BC.

We should be careful not to oversimplify the issues, for many other factors may have been equally important during the latter period, in particular pressures created by rising numbers in areas which could no longer support them, and even the breach in political relations occasioned by the collapse of the long distance exchange of fine objects. At the same time we should remember that the building of defensive monuments would have had many of the same effects as the construction of ceremonial centres.

For our purposes, we can divide the prehistoric sequences into four periods. The first is the period in which farming was first adopted in the British Isles and runs from the beginning of the fourth millennium BC until the start of the third. During this period a considerable number of quite complicated monuments were built, which despite their differing forms seem to have shown a common concern with ancestry. The most dramatic of these sites were some of the collective tombs which held the remains of a whole series of human bodies which appear to have been introduced as bones after they had received posthumous treatment elsewhere.

As if to suppress the individuality of the dead, grave goods were rigorously excluded from these deposits and the bones themselves were frequently

The major stone phase of Stonehenge required about one and three quarters million worker hours.

mixed or arranged in formal patterns. The burial mounds or cairns themselves could have represented an ideal "house" of the ancestors. In some cases the early stages of funerary ritual may have taken place on other types of site, in particular a distinctive series of large enclosures surrounded by interrupted ditches which may have started life as ceremonial centres.

Even at this early period we can recognize signs of change, although some effort seems to have been made to disguise their true extent by the continued construction of traditional types of monument, often on a much larger scale. We find the first clues in the concentrations of fine objects discovered in some of the enclosures, often artefacts which had been made in quite distant areas. Some of the same sites also show evidence of feasting.

Less frequently we see changes in the funerary record with the burial of intact male skeletons, sometimes accompanied by grave goods. In each case the ideal pattern present at the start of this phase was breaking down, and on certain sites we find that enclosures which could have started out as ceremonial monuments were assuming domestic and even defensive roles.

The responses to this crisis are rather interesting, and my second phase, between about 3,000 and 1,500 BC, illustrates some of the developments that I considered earlier. Initially the division established during the first phase became even wider, and some communities placed a major emphasis on the construction of non-utilitarian monuments, often of considerable size. These are sometimes associated with a whole series of specialized objects or with evidence of large scale feasting, but they do not provide much evidence that political power was vested in individuals.

From 2,500 BC onwards the traditions associated with ritual authority and monument building gradually weakened, although Stonehenge itself is unusual in reaching its greatest elaboration at a time when individual authority was acknowledged by the provision of distinctive, and sometimes quite lavish grave offerings, a development associated with the spread of metalwork. Although competition between groups structured in these two different ways did go on for some time, it is striking that even when it was effectively at an end the newer burial mounds still clustered round monuments which had once been the centres of power.

Around the middle of the second millennium BC, this system seems to have collapsed, ushering in a prolonged period of instability. At this point large burial mounds, or monuments of other kinds, went out of use and we find very little evidence of graves with elaborate contents. The main evidence for the consumption of fine objects, chiefly metalwork, comes from what are often called votive deposits: large accumulations of bronzes often found in rivers or other

wet places. There is little doubt that the scale of consumption increased considerably during this period, although that increase was by no means steady or sustained. The emphasis seems no longer to have been on the person or achievements of the deceased, but on the opportunities which funerals and other conspicuous rituals provided for competitive consumption and for gifts to the supernatural.

During the same period we find two other important developments. There is evidence of renewed feasting, including some specialized sites whose main function may have been large scale meat cooking. During the same period, but largely outside the regions which saw the greatest consumption of weaponry, we find the development of defensible hill top settlements and ultimately that of hill forts.

At this stage, by about 700 BC or a little earlier, conflicts in society came into the open once more, and even by the time of the Roman Conquest they do not seem to have healed. One factor may have been the breakdown of long distance alliances which came about with the demise of the bronze trade, but in a sense the instability of British society observed by classical writers had much deeper roots.

The major change was in the ways in which such tensions found expression. Conspicuous consumption plays a less prominent role until the eve of the Roman Conquest when the influx of prestige goods from Europe was renewed, and the landscape of southern and western Britain in particular was soon covered with a rash of defensive sites. Monuments of a more practical character now took the centre of the stage, however much their sheer elaboration may have been meant above all to impress. Ritual activity and even burial rites were to some extent "domesticated" and contained within the settlement area.

In their place we can trace the development of a whole series of compelling communities. To a significant extent political expansion may have been achieved through management of the food supply, and there can be little doubt that this final phase was a time of massive agricultural expansion. In another period surplus produce might well have been converted into prestige through the provision of lavish feasts, but by the Iron Age methods of advancement were more direct.

The riches offered by Rome, not to mention her interference in British affairs, broke the bounds of the native social system. Had the Roman invasion taken place a century later, there is no saying what kind of society the conquerors would have found. The study of British prehistory would have to take a very different form.

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Putting James Joyce in his place

It's curious how often the theme of disastrous lecture crops up in films. I can never forget Robert Donat escaping from his captors in *The Thirty Nine Steps*, running blindly through the nearest door only to find himself facing generous applause as the mistaken party candidate just arrived to make an election speech.

After an uneasy start, he manages rather well, better than Michael Redgrave in another film of that period, *Thunder Rock*, where he orates to an almost deserted hall, empty chairs stretching as far as the eye can see, on the general theme "Britain Awake".

There is also the lecture flaccid in the screen version of *Lucky Jim*, an equal disaster in itself, though I would except Hugh Griffith's narration from Professor Welch, with his oh-so-superior "filmy speaking" each time the departmental phone rings.

But my favourite botched lecture occurs in *The Third Man*, where Holly Martin's drunken American writer of dime novels stridently in Vienna spins us through a head-over-heels misunderstanding and a head-banging by addressing a meeting on *The modern novel*, unconsciously quoted by Wilfred Hyde White in his lecture on the modern novel.

Nicholas Tucker looks at the perils of public speaking

sentative. Martin has not read any modern novels, a fact that becomes increasingly clear. Finally he is asked by a barely-polite Viennese member of the audience: "Where would you put the novels of James Joyce?" "Who?" asks Martin, playing for time. The question is repeated, disapproval oozing from each liped syllable. Martin still hesitates. "Uh, pretty high." He replies at last, at which point Wilfred Hyde White, head buried despairingly in his hands, declares the meeting closed.

As an occasional guest lecturer myself, I have since had special cause to recall all these scenes. Two years ago, I got up to give my talk, for once remembering to say my magic phrase XYZ to myself well in advance ("Look up! Speak up! Check your title!").

Take it if you are all primary school teachers, I began. "NO! SECONDARY!" came the universal cry. I then went on to say that I was a secondary school teacher, and I was a secondary school teacher.

that everyone had looked half-asleep a moment before. I delivered archly, as if this had been a deliberate try-on, consulting my notes the while. "Introducing books in the primary school", read my title, and the next hour was hard work.

As for small audiences, I have been down to three on one occasion, all of whom looked tempted when I suggested splitting my "monorhymum" into four then going home: the chairman overruled me. But this is easily beaten by the experience of a colleague who travelled half way across Britain to give a talk. At the appointed time the lecture theatre remained obstinately empty, and after craning his neck this way and that and listening for every possible footfall outside, his chairman at last concluded there was going to be no audience.

There were, he assured my friend, many other clashing meetings that day, plus a nasty bout of the going around. It was also a filthy night. Other things being equal, the hall would obviously have been crammed full, but unfortunately, why not a charming country pub? I said. "I was there," he said. "I was there."

My friend, Martin, was a secondary school teacher, and I was a secondary school teacher.



opened in Hampshire, when I was giving a lecture masterminded by my brother, a local resident and someone with whom I had enjoyed this film when it was first released. The audience was again small, and the library cold. One lady walked out half-way and questioned, when I had finished, were spasmodic. Finally, my brother put up his hand, grinning fit to bust. I looked at him uneasily.

"Where would you put the novels of James Joyce?" he asked. This was a question I had never heard of before. I was a secondary school teacher, and I was a secondary school teacher.

created a certain surprise, since my lecture was on children's literature only and my brother was now speaking in an unfamiliar, mid-European accent of his own invention. But on me at least, the reference was not lost.

"Uh, pretty high," I answered. Moments later the chairman closed the meeting, with only a little more enthusiasm than Wilfred Hyde White had summoned up so many years ago. I was a secondary school teacher, and I was a secondary school teacher.

To go or not to go

Adrian Furnham contributes to the South African debate

Debate about South Africa is somewhat like the course of a large subterranean river, erupting periodically on one specific cause and then again some time later for a different but related reason. Last year, it was the visit of the prime minister of the republic, P. W. Botha, and then the "naturalization" of Zola Budd. This year, it has been the controversial visit of Senator Edward Kennedy to South Africa. It all underlines South African poet Roy Campbell's observation, made over 50 years ago:

South Africa, renowned both far and wide

For politics and little else beside. Public debate has tended to centre on whether we should allow certain South Africans (notably Mr Botha last year) to visit Britain. Many academics face a more private dilemma: whether they should visit South Africa. It is not an easy decision.

One important issue needs to be considered as it is the single most disqualifying or damning factor – the question of funding. For reasons which are not always clear, there appears to be a major distinction between a sponsored visit (or "freebie") irrespective of the source of the money – and one that is self-financed.

It is rather assumed that one is "bought" if invited and funded by a university department or research institute just as much as if there appears to be some government money involved. One would be more unlikely to offend one's host by speaking out on social, political and economic injustice if one has been given a totally free, interesting and well-planned "holiday" in a beautiful country.

What few consider is that people may be invited specifically – if not always avowed – to disclaim publicly the regime and all it stands for. But a certain degree of paranoia may be "bought" in South Africa.

While it may seem that an impartial institute or department may be the case, research is not as well funded in South Africa as Britain, which partly accounts for the poor output in all but a few disciplines; most money, carefully controlled and vetted, comes from government. Thirty pieces of silver may easily be disguised in shining and "official" – krugerrands.

There appear to be three main arguments for going to South Africa. One is that one's country politics are less than liberal. The first is the argument of freedom, cause-of-science South Africa is so important from a point of view it is imperative that one visit it to collect data.

Geologists and mining engineers, anthropologists and sociologists, political scientists and historians could all easily make an excellent case for a necessary visit to collect rich, useful, important and unexplored data. But these arguments could make a good case for a visit. Entomologists, theologians, biochemists, educationalists could all point to some feature of the large and diverse country that urgently needs research.

What is less clear perhaps is first how important one may go about one's visit and data collection and second whether indeed one would be able to collect that data. For the social scientists etc., it may be virtually impossible to assess the information that one has come all the way to collect.

Hence it is not uncommon to find many South Africans doing "higher degrees in Britain on aspects of South African life" – because more reliable data is to be found here than there. To R. S. Peters out of context: "Passive, patient, presuppositional enquiry is a methodological myth."

A second argument is the politician's when explaining both their visit and their being visited by ordinary South Africans. It is used by the Clapham brothers (or more likely by the Clapham brothers) and it is used by the academic, including to visit South Africa. It is the comparative

argument which goes: "Why single out South Africa...? If you are so interested in injustice why did you visit...? What is so special about South Africa...? If we had not visited all countries that are politically unacceptable we would hardly be able to go anywhere... certainly not Russia and the Eastern bloc countries (and depending on the sensitivities of the listener) and also Israel, Chile, Northern Ireland."

It is an argument which does not attempt to excuse or explain the South African situation but rather to appeal to the contradictory (hypocritical is the stronger form) standards used by people to rationalize their behaviour. The ordinary South African used to use "apartheid" but it is probably now Zimbabwe or Angola for comparison, while in Britain Russia is the favourite example.

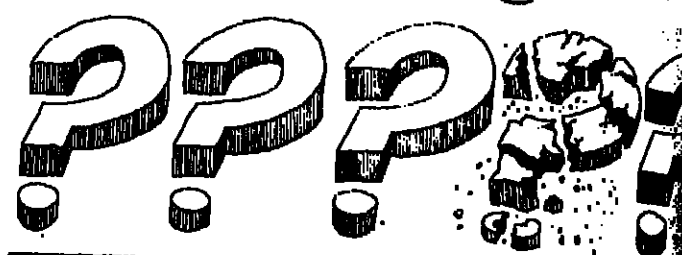
In a sense, of course, the comparative argument is not an argument at all – is a call for a consistent, absolute and explicit standard for discrimination. Implicitly however there is often the assumption that other countries are even more "evil, unjust" etc. than South Africa and hence deserve more criticism.

The standard reply to the comparative argument is simply that South Africa is a special case because it is unique in having racism entrenched in its constitution. It is the only country on earth where so much of one's life (place of abode, educational possibilities, even potential marriage partner) is determined by the colour of one's skin.

Zealous lawyers will of course immediately give isolated counter examples of countries where for special minority groups there are laws which discriminate on racial or religious grounds (they often covary). But these are examples of the subtleties of fundamentalism – they do not contradict the point that for all the peoples of South Africa the colour of a person's entire educational, economic, medical and political life is the colour of one's skin.

Supporters of the comparative argument at this point may point out that these criticisms of apartheid are out of date. With the new plural democracy and the establishment of a term "homelands" these criticisms are invalid because heavily-armed South Africans will be white and hence there will be no racial discrimination. This leads one to the debate on the status of the "homelands" – the ethics of the "grand plan" of apartheid etc.

Finally there is the possibly arrogant argument that a visit may actually benefit the lot of people in South Africa. Some prominent academics (for example Paul Hare the sociologist) have in fact chosen to live in South Africa specifically to do their "bit" – at personal cost – for change. It can be argued that in South Africa the universities (specifically the liberal ones) are making universities provide the most important, effective, cooperative



Controversial Kennedy with Winnie Mandela, wife of prisoner Nelson Mandela.

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Making substance of the outline

Martin Bulmer looks at the changes in applied social research since it took off in the 1960s



Twenty years of social change: the census in 1961...

Applied social science research in Britain is just about celebrating its coming-of-age. For it was about 21 years ago that several converging trends led to the rapid growth both of academic social science and of applied social research for policy-making in government. How different is the picture in 1983 from what it was in 1964? Is the impact of social science any greater now than it was then? How does the contemporary contribution of survey research differ from what it did earlier?

Looking back two decades at first sight gives the impression that around 1964 there was take-off into self-sustaining growth. In the early 1960s there were as many sociologists in the whole of Britain as historians in Oxford alone. Since then the subject, along with social psychology, social policy and political science has grown out of all recognition. In 1964, too, government social research was slight and non-academic survey organizations modest in scale. The tradition of the social survey in Britain goes back of course much further, but in the last two decades there has been a qualitative change in its scope, size and impact.

This is not to imply a Whiggish view of things getting steadily better. The University Grants Committee cuts of 1981, Ramsey on government statistics and the Rothschild review of the Social Science Research Council have all taken their toll. But social science and survey research have stood up remarkably well and are in a healthy state despite these tribulations. After all, sociology is still taught vigorously at most universities and polytechnics, the General Household Survey took place despite cuts in funding, to give but three examples.

The key event in the academic take-off of social science was the Robbins report of 1963 and the report of the Heyworth Committee of 1965 on Social Studies. Robbins laid the groundwork for the rapid expansion of social science teaching in universities and polytechnics. Heyworth recommended the rapid expansion of social science research, with appropriate government support, and led to the foundation of the SSRC.

In the world of government the change was slightly less dramatic but none the less clear. During the 1960s, social expenditure on housing, education, personal social services, health and social security all increased rapidly. There was more demand for information about disadvantaged groups such as the poor, handicapped and unemployed, as well as ethnic minorities. There was growing interest in the impact of social and economic policies upon individuals and groups. Such questions as whether services were reaching those for whom they were intended or how far equity was being achieved required research to answer them.

Robbins was a watershed in more than one sense. The extensive statistical research undertaken for it by Claus Moser underpinned the persuasive arguments for expansion. It showed that rigorous and carefully-conducted research could contribute to the determination of a major issue of public policy. Thereafter, royal commissions were much more predisposed to use social research as an aid to their deliberations.

There was some crossing over and mutual influence between the two spheres of academia and government. Robbins and Moser, for example, both moved easily between the two realms. There was limited movement into the civil service particularly of academic economists after the change of government in 1964. Expanding jobs in the non-academic research sector were filled by new social science graduates.

What is more striking, however, is the relative insulation of the worlds of academic research on the one hand and of policy-oriented survey research on the other (see "A suitable case for state aid", *THES*, April 22, 1983). The failure to

institutionalize survey research in universities and to forge strong links between academic social scientists and practising survey researchers outside has diminished the potential contribution which different social sciences could make to policy research.

So far I have referred both to "social science" and "social research" and treated "survey research" as part of the latter. The point of this differentiation, which is central to the argument, is that in British academic social science on the one hand and empirical social research (including survey research) on the other are not coterminous. It is a fair bet that in any gathering of non-academic social policy researchers, a majority do not identify as social scientists but as survey researchers; do not read academic journals; and do not think that academic social science has much relevance to their research practice. Yet in fact social science does, at least potentially.

It is true that much of British sociology and political science, which might have been expected to nurture it, have been at best indifferent and at worst hostile to social survey research. Professional survey researchers, on the other hand, have seen little need to turn to social scientists for help. This mutual suspicion, though it has not been total, has had various unfortunate consequences, particularly in suggesting there may be two classes of workers, those with ideas and those with practical skills.

What is "applied" about "applied social research"? Though the distinction is frequently made, the line between pure and applied research in social science is much less sharp than in natural science and technology. There are several different modes of social science research – strategic research, evaluation research and action research for example – which cannot easily be pigeonholed as either.

One popular view sees applied social science as "social engineering". In this model, one starts with a problem; identifies the missing knowledge; carries out research to collect data and test relationships; provides an analysis of the problem, which one then presents to the policy-maker for action.

The social scientist is seen as akin to an engineer or doctor prescribing solutions to society's ills. There are powerful criticisms of this approach. Its view of policy-making is over-rational. Much policy-making is confused, messy and inconclusive, with uncertain outcomes, so that knowledge does not feed in and fit in in the way prescribed. Moreover, most of the conclusions, empirical generalizations and theories of social science research are insufficiently conclusive to provide the kind of certainty which the model promises. The scientific claims made for policy research are much too strong.

A more plausible model is the "tentative" or "limestone" model of influence. Even when research seeks specific answers to practical questions, its aim is to create the intellectual conditions for problem-solving rather than to find discrete solutions to specific problems. The "limestone" analogy conveys it well: water trickling down through strata gradually wearing away the stone (changing outlooks and opinions) rather than a more dramatic shift such as is achieved by blasting or an earthquake.

If one finds the "limestone" model more persuasive, then immediately one can identify a most important contribution from the social sciences to applied policy research: general ideas. Different social sciences provide general frameworks within which particular social processes may be made sense of. The Popperian searchlight, throwing into relief testable hypotheses, can provide the necessary focus to link particular observations to more general ideas. Economics offers general theories. Other social sciences can, more effectively, contribute specific and fruitful middle-range theories, such as con-

sumer-choice models of voting behaviour, or relative deprivation as an explanation of the scapegoating of welfare recipients, or cognitive dissonance theory as accounting for the ineffectiveness of communications.

Such theories can aid policy-makers to interpret and understand the world they are trying to deal with. Evidence from several studies of the utilization of social science research by administrators (by Carol Weiss at Harvard, Nathan Kaplan at the University of Michigan and Karin Knorr in West Germany) showed that they did not use research to find discrete solutions to problems but rather to orient themselves and make sense of the world, with the aid of the concepts and empirical generalization derived from the work that they read.

The second contribution of social science is more down to earth: substantive knowledge. Professional survey researchers are highly project-bound; moving rapidly on from one to another under customer and commercial pressures. There is little time for reflective secondary analysis or the development of subject-matter expertise. This academic, though less likely to be a methodological expert, can offer – whether the topic is travel to work, disability, voting behaviour, racial disadvantage, or whatever.

Already, there is a good deal of academic expertise fed in through secondary analysis of survey results. The General Household Survey and Family Expenditure Surveys are regularly mined for these purposes. But much more cross-fertilization could occur, particularly at the early design stages of research, and while surveys are out in the field. The ESRC Survey Link scheme, coordinated by Professor Aubrey McKennell, is currently aiming to foster this on a modest scale.

A third contribution of social science is made by the social scientist as policy adviser. This role has been filled most comfortably by economists, from Kaldor and Balogh in the Wilson years to Alan Walters in the early Thatcher years, but those from other backgrounds have been important at various times: David Donnison on housing policy, Chelley Halsey at the DES, Brian Abel-Smith at DHSS, William Plowden and Tessa Blackstone at the Centre for Policy Research Studies in the 1970s, Bernard Donoghue at the 10 Downing Street policy unit. Such social scientists have to have finely-tuned political antennae as well, but all were in the business of bringing social science work to bear on policy.

They are the further we have gone – a lot less than in the French or American systems – to bring outside social scientists directly into the policy-making process. These cases aside, and with the exception of the government economic service, the civil service remains closed in its higher reaches to social scientists. A different role for the expert has lain through the industrial revolution, the creative fusion of academic input, survey professionalism and policy relevance as strongly as does the best work coming out of American centres like the Michigan Institute of Social Research or the National Opinion Research Centre in Chicago, where the social science influence is stronger. PSI and SCPR, for example, still generally lack the academic input which would make their contribution more effective.

A political interpretation of applied social science might contrast the handy optimism of the start of the 1964 Wilson government with the deep pessimism of the Thatcher years. Yet this would be a considerable oversimplification. Despite changes of political control, applied social science looks very different today from what it did 21 years ago for a variety of other reasons. In the universities the social sciences are now established in substance where previously they only existed in outline. A large body of applied social research is now conducted in non-academic settings, a good deal of it within government. Social science now provides both news and background for the media on a considerable scale. Times are leaner, but the substantial achievements over two decades of both academic social science and applied social research look set to last. It would be even better if more ways could be found to move them closer together, for the mutual enrichment of both.

One should not exaggerate the impact of social science advice, which has been widely scattered. Both within government and on royal commissions, the British idea that "he who does, knows" holds a very powerful sway. A structural obstacle in Whitehall to the more effective use of social science is the gap between the rather olympian advisers already mentioned at the top, and departmental research divisions where survey expertise resides. There are few social scientists in between. There are not social analysts involved in the policy-making process as insiders. In the highly-centralized and closed British system, this

has been a drawback, and has meant that influence has been brought to bear in other ways. One such way is through pressure groups and the media, at arm's length from government. This is the way, *par excellence*, in which the trickling down through the limestone occurs. Short shrift may be given to the expert in public life – no expert is more damning for a politician than "clever" – but politicians and civil servants pay great attention to the media and pressure groups. Press reporting and filtering of the results of social science is read carefully. On the pressure group front, bodies like Help the Aged and the Child Poverty Action Group mount and use research to press home their case.

Another mode of influence has been through quasi-political intellectual groups and think-tanks. In social policy, the Fabian Society is the most famous example, but the Fieldwork Foundation, the SDP now sports the Tawney Society, while on the right, in addition to the Bow Group, the Social Affairs Unit is an offshoot of the Institute of Economic Affairs and the Centre for Policy Studies is the creation of Sir Keith Joseph. Paradoxically, the effect of such groups may be to further distance academic social science from applied survey research. The involved academics are seen to be *parti pris*, not much interested in the technical side of research, while applied researchers are charged of getting too closely identified with politically partisan positions.

A different and more fruitful way in which applied social research has been institutionalized is in independent, non-partisan, not-for-profit research institutes. One of the earliest was the Institute of Community Studies, whose widely read books had such an influence upon planners and architects in particular 20 years ago. The Policy Studies Institute (incorporating Politics and Economic Planning) has carried out notable survey research on industrial relations, race relations, and recently the Metropolitan Police, which has had a marked impact upon official thinking. Its staff are mainly social scientists, though working outside the academic world.

Among survey agencies, Social and Community Planning Research has established itself as the leading body carrying out public policy surveys. Its new social attitudes survey was launched with some *accolade* in *The Sunday Times* last autumn, for example. Even these centres have not achieved the creative fusion of academic input, survey professionalism and policy relevance as strongly as does the best work coming out of American centres like the Michigan Institute of Social Research or the National Opinion Research Centre in Chicago, where the social science influence is stronger. PSI and SCPR, for example, still generally lack the academic input which would make their contribution more effective.

A political interpretation of applied social science might contrast the handy optimism of the start of the 1964 Wilson government with the deep pessimism of the Thatcher years. Yet this would be a considerable oversimplification. Despite changes of political control, applied social science looks very different today from what it did 21 years ago for a variety of other reasons. In the universities the social sciences are now established in substance where previously they only existed in outline. A large body of applied social research is now conducted in non-academic settings, a good deal of it within government. Social science now provides both news and background for the media on a considerable scale. Times are leaner, but the substantial achievements over two decades of both academic social science and applied social research look set to last. It would be even better if more ways could be found to move them closer together, for the mutual enrichment of both.

The author is senior lecturer in social administration at the London School of Economics.



...and in 1981

Colouring in the people in education's history

"I must endeavour to control my atavistic instinct. That was my first experience and one of my most lasting memories of secondary education."

My entry to secondary school had been delayed by the outbreak of war – the grammar school, an antiquated building in a rundown area of town, having no air raid shelters. With roomful of other 11-plus successes I was eventually sharing nervousness and anticipation. The begowned figure erupted through the doorway and told us to shut up. In uncomprehending silence we watched him write that sentence on the board, and distribute lined paper, on which we were to copy it out 100 times.

He settled down to the real business of, I presume, preparing the register, and we – without knowing it – became part of the history of the grammar school. That is all I remember of that day, but when I once asked my colleagues in a university department what they remembered of their first day in secondary school, I don't think any of them remembered a thing. My wife remembers nothing. I don't believe I remember anything else of my first year.

Autobiography, and even biography, have played only a small part in writing the history of our educational past. Perhaps the material is scanty, the generalizable evidence slight, the applications for the present unobvious and the grand design (if elusive). But listen to John Bezer, an old Charlton who publicly in 1951:

Among the many days I shall probably for life remember, is the 21st of December, 1821, when breeched for the first time, and twopence in my brown pocket, I proudly marched to Raven Row Sunday School and had my name entered.

He attended for 15 years and always, he emphasized, "loved my school". Or, some 40 years later, Joseph Asby reported as saying:

... go, not dull. One didn't learn much but the place was full of feeling... Life was unexcited in school... school was so unreal rich with frustration.

Or, to turn to another country, the letter written back home (and reprinted in print by Oscar Handlin) by the Polish immigrant to Boston in 1919:

... my friends are Polish people – I must live with them... I want to live with American people – but I do not know anybody of American... I go 4 times to teacher and must pay \$2 weekly... the teacher teach me – but when I come home – I must speak Polish... I want to go in the city, free evening schools and learn.

These are not anecdotes. They are profound personal and educational histories, each of which points to a variety of directions in British or American social history.

There are historians of education who have laboured to find the sources and contexts of their value. In the United States Gerald Clifford has been single-minded in pursuit, Charles Strickland (including in a paper entitled "Putting in the People's History" in *Educational History*) and others have ransacked the published and the unpublished – diaries, letters, fragments... Contributing to the History of Education Society's bulletin. In Britain have argued the case for the use of such material – and one of the best examples has listed over 250 items of autobiography of value to the educational historian.

Without advancing a conspiracy theory of autobiography, things do, in fact, seem to have been going on for a long time.

on and become, if not fashions, at least acceptable strategies. I am not sure whether that explains the success of the autobiographical – obviously the oral history movement helps to explain some twentieth century efforts. But we have been witnessing a small international burst of interest in the autobiographical and biographical in education.

Anything in education, in fact, requires special explanation – while the autobiographical and the biographical in, for instance, the military, the church, politics or many other environments requires none. All of these have their mystiques and cults and places on station bookshelves. Almost everyone except the educationists has their public Square to walk from Trafalgar Square to almost anywhere and bow en route to the statue in memory of a prime minister, a foreign politician, a nurse, a writer, a representative of callings galore. Most cities have their kings and queens and benefactors standing or sitting or riding guard. Writers and opera singers most frequently have a discreet plaque. But where, on a horse, or in a toga, or just there – even in the smallest of plaques – is the headteacher, the teacher, the educationalist, the educator?

Educational heroes (how many do you remember?) linger only as segments of their other, more memorable, lives. How do school people write them, how dare they, decades or centuries later, find enthusiasts willing to rescue them? And who wants to know about the rank and file teacher (while the soldier and the lesser photographer make the Sunday supplement)?

Education, one of the world's greatest (numerically, of course) industries, slides apologetically into the world's literature, and battles with ministers to retain dignity.

All the more difficult to explain the autobiographical fringe. John Burnett republishes the nineteenth century autobiography of John Buckmaster – recalling his school teaching, but stopping short of his translation to inspection. In the US the diaries of a schoolmistress in nineteenth century Georgia are published. In the Melbourne *Studies in Education* and Seligson and Sullivan's *Not so Enlightened* a moment of reconstruction of the educational everyday is visible: as it is in Philip McCann's interviews in Newfoundland published in *Blackboards and Briefcases* – a parade of struggle against hostility, prejudice, the climate... by teachers, administrators and others. Nothing apologetic in any of these.

There have been attempts to establish an autobiographical and biographical genre in English education. Burnett has not been prominent. H. C. 100th birthday published – when he was a youngster of 86 – an account of his school days. Harry Judge has now offered us a new formula, and it was his recent *A General History of Schooling* which prompted my memory of that first day, a host of other memories, and these present thoughts. Harry Judge's formula is simple, straightforward and successful. He writes: a history of secondary education since 1944, and interviews with it a personal story, his family's educational past and present, his own location in time and place in relation to the national events, his outline and the experience of schools and schoolpeople.

What Judge's book does is suggest another way of putting the people into history. It may have to substitute for a toga and a horse in Trafalgar Square

BOOKS

Noble visions and faculty feuds

by Iain Wright

The Leaves' recollections and impressions by Denys Thompson
Cambridge University Press, £15.00
ISBN 0 521 25491 9
Mansfield Forbes and his Cambridge by Hugh Carey
Cambridge University Press, £15.00
ISBN 0 521 25680 1

William Empson, sketching a brief history of the rise of F. R. Leavis and of the decline of Cambridge English into "arty and smarty moralizing", once apologized for bothering his readers with such parochial matters. "This bit of local history is not important," he said, and it was worth remembering that when American critics (for instance) showed any awareness of Leavis at all, they saw him as a violet by a mossy stone half hidden from the eye. Empson did have a point. Even today, the names of the two Leaves and of Mansfield Forbes don't cut much ice at Yale, or the Sorbonne, or Frankfurt, and many overseas readers - in fact, many readers more than ten miles away from Great St Mary's - are going to be puzzled at why an international academic press like CUP should have decided simultaneously to publish not one but two volumes of biographical anecdotes about three rather eccentric Cambridge literary dons. They don't quite look like contributions to the mainstream debates of the mid-eighties, after all. Was the enterprise really worthwhile?

It was worthwhile, in fact, because (as Empson knew perfectly well) this is not merely local history. "Cambridge English", especially in Leavis's version, had an influence which extended far beyond Cambridge, beyond the academy, and beyond England. It had a major effect on the teaching of arts subjects in secondary schools, for instance. It initiated a new style of quasi-sociological analysis of the mass media, whose influence, via the work of Raymond Williams and others, descends to today's "cultural studies". And for an example of its currency in the Commonwealth, see John Docker's "I Was a Teenage Leavisite" in the Melbourne journal *Mosaic*. This is therefore a story which does need to be told; and since Cambridge English was strongly marked by the idiosyncratic personalities of its creators and by the peculiarities of their particular Cambridge - since it was as much made by their charismatic performances in the lecture room as by what got put down on paper (nothing at all for Forbes's case) - the biographical aspects are of some importance and I suppose that even anecdotes about Queequeg Leavis's pastimes and paranoia, and full-page reproductions of Mansfield Forbes's menu card for the Clare College Annual Dilettante Debutant of 1928 have their place in it.

But what in the end makes both these books rather depressing reading



Mansfield Forbes in December 1924

is that the more the detail is filled in, the stronger grows the sense that much of the story was and has continued to be that of a disproportionately violent storm in rather a small teacup; that so often (with the exceptions of Empson's and I. A. Richards's parts in it, which were notably short-lived) it was indeed "local" in Empson's sense - parochial, inward-looking, intellectually insular, and oblivious of the great contemporary debates in European thought; a story, in consequence, too full of loneliness and isolation, both intellectual and personal, and of the wasting or deflection of prodigious idealism and creative energy.

That is harsh judgement to make. It is also a deeply ironic one, for Roland Penrose said that Forbes was the only don in "provincial" interwar Cambridge who "had any interest in the visual arts or any knowledge of recent painting". In Europe, and both Forbes and Leavis set out above all else to overcome the narrowness of established literary studies. They had wide

interests and wide vision. They aspired to connect their subject to what was most alive and hopeful in contemporary art as it tried to make a new start after the trauma of the war. But something went seriously wrong, and as a result the legacy of "Cambridge English" has been and remains a dubious one.

Forbes's story is the less depressing of the two. He at least seems to have consistently enjoyed life, and to have been the cause of much enjoyment in others, and the value of his main achievement is undoubted: the resuscitation of the newly-established Cambridge English Tripos from the cobwebby embrace of traditional philology and from belittled chit-chat; the hiring of I. A. Richards (who had not thought of becoming a professional teacher of English and who was taken up by Forbes after he had dropped in for advice about becoming a mountain guide in Skye) and the pointing of Richards in the right direction, the most fascinating and historically the

most important part of Carey's book is the appendix of Richards's letters to Forbes, in which his critical theory can be seen gradually coming into focus; in general, his unrivalled skills as an *animateur* and dispenser of intellectual fizz and sparkle, so that even Leavis, hating anathematized all the other founding fathers, had nothing but generous praise for Forbes's "courage of life and... the impulse and the power to stir intelligence into active life in others". All this Hugh Carey's book conveys very well. But how odd, and in the end how saddening, that Forbes wrote so little himself and that all those brilliant lectures have left not a wrack behind; that when something evidently started to go wrong with the new faculty, and the infighting became entrenched, he could not follow his initial vision through and simply faded out; that his only major piece of writing was the "magnificent silliness" (as Keynes called it) of the limited edition history of Clare College and that, as the years go by, and despite Carey's brave efforts, it seems likely that the silliness will survive better than the magnificence, and that this peculiar figure, with his pyramidal toms showing beneath his trousers in the lecture-room and his digressions on Swedish architecture and Pictish burial-rites, will come to look more and more "period" and dilettantish, a dated archetype of donnish eccentricity.

Why did his career turn out that way? Carey tells us very little about the difficulties of Forbes's private life (and nothing at all about his problems with his sexual identity), but the answer must lie in the interaction between a powerful but frustrated personality and the context - the conditions for purposeful collaborative work - which his Cambridge provided, or failed to provide.

The same is true of Leavis, but the tale which his friends and colleagues have to tell is a darker one, that of a decline from the young activist of the early thirties - "strong, idealistic, cheerful for the future" - to the dying man visited by Michael Tanner, "sunk in unapproachable and terrifying gloom. I can't imagine seeing anyone look so desperate. All he said was 'I'm not feeling chippy.' A man whose life-work, conceived as a grand cooperative enterprise, the common pursuit of true judgement, became more and more of a lonely monologue, as if he was mimicking the hero of one of Beckett's novels, trapped in the circularity of his own discourse, to end in unproductive anger, repetition, and silence.

Thompson's book describes the causes and the effects of all this in Leavis's personal life well enough, and brings out a good deal that was not previously public knowledge, particularly the peculiar dynamics of the Leaves' marriage and working partnership. His niece goes as far as to claim that his later years were poisoned more by Queequeg's vituperations against family and friends than by his celebrated academic rows, and

most of the contributors seem to agree with Raymond O'Malley that he lived for years in a state of terrible domestic tension and frustration, "wearing himself out in trying to protect her against herself".

But that is only half the story, and this book, as an album of "recollections and impressions", could not be adequate to the other half. Only David Holbrook, deliberately rejecting that format, has a shot at trying to explain what it was in Leavis's intellectual positions, rather than his family life or faculty squabbles, which led to such an extreme of self-imposed solitude. The root-difficulty, surely, was that he was passionately committed to a philosophy which he could not systematically expound, because systematic exposition was "abstract", and abstraction (as opposed to concrete experience, or "Life") was the arch-enemy against which his philosophy had to define and defend itself. The causes of this strange ultra-empiricism and distrust of "theory" remain unclear: they seem to have been the expression of an obscure vitalism which derived in turn from the young Leavis's fear of science and from his consequent readiness to be over-pressed first by T. S. Eliot's "dissection of sensibility" theory and then by D. H. Lawrence. Its effects are now sadly evident, however. The dialogue with other disciplines which he had hoped for in the early days did not materialize. Leavis's was a world-view which simply did not fulfil the minimum conditions for genuine reasoned debate between differing intellectual positions. Adherence to it began to look more and more like an act of faith, and the movement which it produced became first a coterie and then a cult. Holbrook believes that Leavis's greatest mistake was his failure to see that, in order to realize his vision of cultural renewal, what was needed was not "the training of an elite" (his explicitly stated aim) but "offering ideas".

That is the right emphasis, but it does not go far enough: what Leavis gave his followers was the sense of belonging not merely to an elite, but to a kind of priesthood, a beleaguered priesthood, keeping alive the sacred flame in the new materialist Dark Age. That, ironically, is the picture which emerges most clearly from this collection of the Leavesites' vision of themselves as a "Chosen Remnant" (Muriel Bradbrook); of Leavis himself as "a secular saint of the modern University" (Michael Black) and "the last prophet we had in England" (quoted by Sebastian Moore); of falling under his influence as being "like a religious conversion" (Michael Tanner). "Scrutiny was my bible," says Donald Davie, "and F. R. Leavis my prophet". It does begin to look as if Leavisism will come to seem of less interest as a contribution to the history of ideas and more as the raw material for a curious case-study in the social history of religion: substitutes and half-secularized sectarianism.

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BOOKS
Economic causes of famine

Resources, Values and Development by Amartya Sen
Blackwell, £25.00
ISBN 0 631 13342 9

While the market for publication of new research is usually held to be deficient nowadays, there appears to be little constraint on reprinting in volume form the articles of distinguished scholars. The present collection is the second to appear of Professor Sen's papers. "They deal with institutional complexities of economic development, the untidy parts of the theory of resource allocation, the peculiar role of values in social behaviour, the conflicts and contradictions of normative assessment, and the challenges to economic theory and policy presented by information lacunae and conceptual ambiguity."

Power changes

Policy, Power and Order: the persistence of economic problems in capitalist states by Kerry Schott
Yale University Press, £12.50
ISBN 0 300 03237 4

The central thesis of this book is that the twentieth century has witnessed a dramatic increase in the power of the working class in all the advanced, non-communist, industrial nations. A consequence of this, the author contends, has been increased state expenditures and state intervention designed to further the interests of this class. Accordingly, the simple Marxist notion that the state is the agent of and acts solely in the interests of the capitalist class, is naive and inaccurate. Equally naive is the view of the state upon which most economic policy has been based. This suggests that the state is the neutral arbiter of the interests of the many groups which comprise modern pluralist society, and is concerned to promote only the public good.

The increased power of the working class is suggested by the author to have manifested less during the 1950s and 1960s for workers' aspirations could be satisfied from the growth in output that characterized this period. However in the 1970s and 1980s growth rates have slowed, economies have stagnated and a crisis has thus emerged. A new and unique conjuncture of events confronts all developed countries at the present time, namely a powerful working force and a stagnant economy. Under these circumstances it is argued the state must encourage new investment activity to restore economic growth and satisfy the demands of the working class. This it can do by either socializing investment or by encouraging private investment. But both these options are fraught with difficulties and can provide at best only a temporary amelioration. For it is asserted the return on investment falls in the long run and workers will not be willing to forgo present consumption in order to facilitate investment which they perceive to be producing an increasingly slower rate of growth of output than achieved in the past. This is indeed a pessimistic outlook.

What is the evidence produced to substantiate this thesis? First the growth in the proportion of the workforce which belongs to unions is detailed for the period 1900 to 1976, and second the extension of the franchise and growth in the percentage of votes cast for left-of-centre parties over the period 1900-1980 are detailed for the countries in the Organization for Economic Co-operation and Development (OECD) to support the claim that the power of the working class has increased. However the late 1970s and early 1980s have witnessed a reduction in union density in many OECD

Finding a generally descriptive title for them could not have been easy. There are 20 papers in the collection. Almost all are concerned, or will appear, in journals and books likely to be available in any university library. Over half have been published or written in the last five years. Inevitably, the volume contains much repetition in ideas and information and in the copious bibliographies. Also unsurprisingly, some of the papers are heavily derivative from other of Sen's publications, notably his recent book on *Poverty and Famines* (1981). A long introduction offers afterthoughts and a mass of references to related literature.

The contents relate broadly to development economics, though much of the analysis is remote from the practice of development policy-making and some of the topics (such as the economics of the family) have been little considered by development economists. One group of papers is concerned with the conditions of the most deprived group of persons, deprivation being defined in access to "primary" or indispensable goods, makes more appeal, but it is observed that needs of primary goods vary among societies and with personal occupations, health, disabilities and age. Sen therefore substitutes primary capabilities (such as the ability to fulfil nutritional requirements, to be acceptably clothed, or to move about) for Rawls's primary goods, relegating goods to an instrumental and continuing role.

countries, sometimes on quite a dramatic scale as in the UK. This period also saw a growth in the share of votes going to right-of-centre parties and the return of right-wing governments in all the major OECD countries with the exception of France and Australia.

These developments would seem to represent a substantial qualification to the author's thesis, or are they merely temporary aberrations? Unfortunately we have no way of knowing, for the author fails to identify the forces that give rise to the growth in union density and left political representation which she identifies. Greater insights have been provided by other analysts who have attempted to explain the wage inflation of the 1970s, in a somewhat similar manner, as a consequence of rising aspirations and militancy on the part of wage earners. They have attributed these developments to the full employment of the 1950s and 1960s and suggested that the power of wage earners during this period resulted from the increased demand for labour services, and was accordingly likely to exist only as long as this demand continued. The late 1970s and early 1980s saw a dramatic fall-off in the demand for labour in the OECD countries and the power of organized labour has diminished accordingly.

What then are the economic consequences of this rise in workers' power which lead to the present problems confronting the OECD countries? The author contends these are, first, wage and price stickiness, and second, the growth of public expenditure. Evidence on the former is produced for the US only for the period to 1975, a country in which it is mistakenly suggested that union density averaged 39 per cent over the period 1951-76. In fact union density in the US is now little more than 20 per cent and has never reached 39 per cent. The US is, moreover, an economy which has exhibited a considerable degree of wage flexibility in the 1980s. Be that as it may, money wages have proved remarkably inflexible in most OECD countries in the face of the recent high levels of unemployment, but there is no correlation between wage inflexibility and union density as the author indicates. It is evident that wages are not the only non-union jobs and the search for an explanation of this must take us beyond the area of union power.

That the share of public expenditure in gross domestic product has risen dramatically during the 1960s and 1970s in practically every OECD country is one of the facts of economic life. But to attribute this development to the growth in working-class power is another matter. It has recently been shown that in the UK at least the major beneficiaries of this increased state expenditure have been among the most privileged members of the working population, namely the middle classes.

It might be supposed that increased working-class power would lead to the development of corporatist arrangements, and this issue is examined in the most interesting part of this book. In

include the long survey article on "The Welfare Basis of Real Income Comparisons" from the *Journal of Economic Literature*, 1979, but are mostly concerned with the ethics of distribution. Sen's concepts of capability and entitlement, and his interpretations of the meaning of poverty and the causation of famines. This material has acquired considerable topicality.

Sen resists utilitarian ethics mainly on the ground of a particular formulation of the impossibility of interpersonal comparisons of utility, namely the dependence of states of satisfaction on the means available to provide them, in consequence of which people with little means (such as illiterates and women) have learned to be easily satisfied or to "take pleasure in small mercies." He objects also to morality based on rights which are acknowledged independently of the consequences (even, say, starvation) in which they might result. The Rawlsian principle of basing distributive justice on the conditions of the most deprived group of persons, deprivation being defined in access to "primary" or indispensable goods, makes more appeal, but it is observed that needs of primary goods vary among societies and with personal occupations, health, disabilities and age. Sen therefore substitutes primary capabilities (such as the ability to fulfil nutritional requirements, to be acceptably clothed, or to move about) for Rawls's primary goods, relegating goods to an instrumental and continuing

role. This approach has an obvious affinity with the basic-needs objective of development revived by the International Labour Office in the 1970s and Sen develops several pages to explaining the differences. Personal capabilities are achieved through entitlements, which depend partly on ownership, production and exchange, and partly on intra-familial transfers, "social security" (or intra-communal transfers), and collective provision. The latter sources of entitlement may buttress the former, but law, institutions and custom also curtail entitlement - as, for example, in basing the distribution of food, health care and schooling against the female population in South Asia.

Poverty means entitlement inadequate to achieve primary capabilities. Starvation means entitlement inadequate to support life. Mass starvation, or famine, can therefore result from a widespread collapse of entitlements, as well as, or rather than, from a contraction in food availability. The paradox of export of food from an area suffering famine is thus explained.

Sen concludes from his studies of the Bengal famine of 1943, the famine in Wollo province of Ethiopia in 1973 and the Bangladesh famine of 1974 that in each of these cases people starved for want of entitlement to food rather than because of decline in food availability. In the second case, however, farm production evidently did fall, because of drought, and the argument that

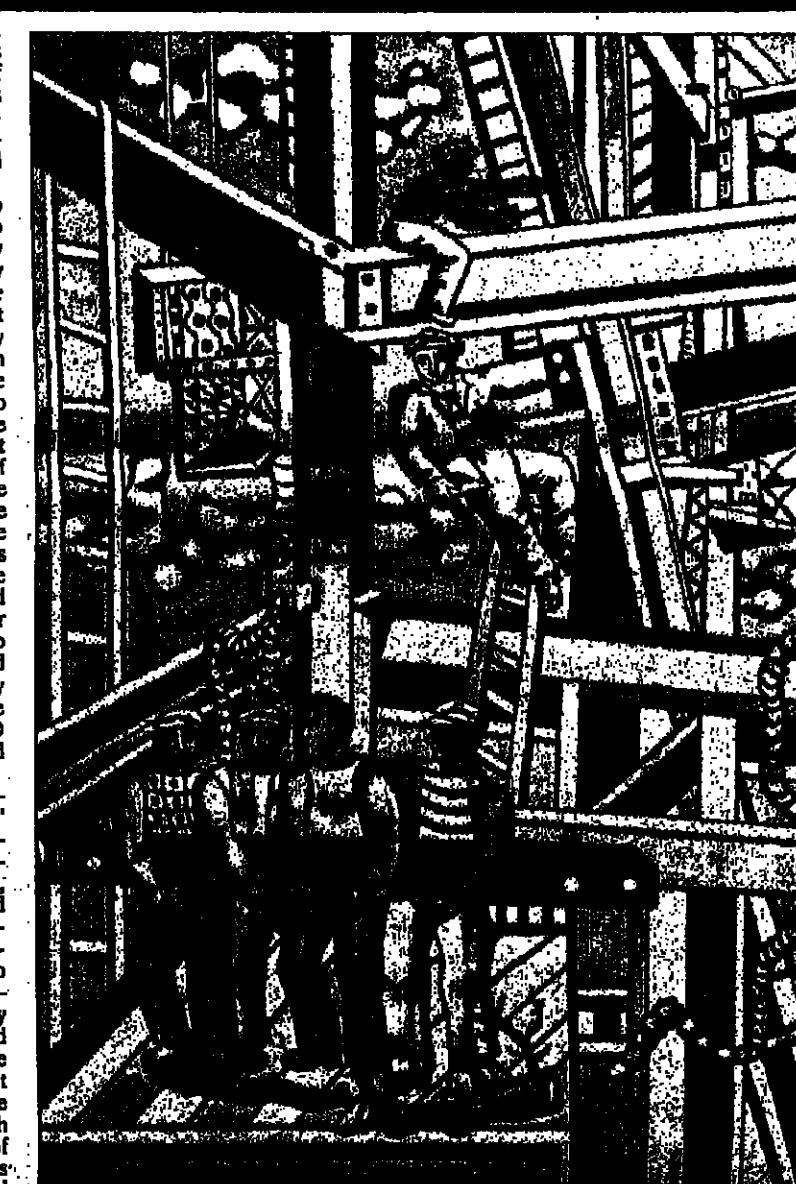
there was no decline in food availability depends on shifting the frame of reference from Wollo to Ethiopia as a whole. What makes Ethiopia appropriate frame of reference is presumably a belief that the Ethiopian government has responsibility for feeding the people it claims to govern. Here the distinction between shortage of food and lack of entitlement as the cause of famine seems to become merely semantic. In the other cases, the principal victims of the famines were rural inhabitants other than farm proprietors, and they suffered because of failure of their money-incomes to adjust fast enough to inflationary forces which apparently drove up the price of rice faster than other prices. It is not enough, therefore, to judge the risk of famine from estimates of food production and population size. Mass starvation can also result from drastic changes in exchange entitlements (or relative prices) affecting adversely large occupational groups. Avoidance of this deprivation requires that the primary capability to fulfil nutritional needs be guaranteed by social security.

This idea, and some radical extensions of it, were given an airing in the 1930s and 1940s in the debates that led to free school milk, wartime rationing schemes, and the Food and Agriculture Organization of the United Nations. Lloyd Orr, for example, wanted "food for the world" to be regarded "like a clean and adequate water supply for a town," as a public utility or social service paid for by the whole community. As yet, however, many of the countries about which development economists write have still to establish clean and adequate water supplies - which might be considered a more urgent, and perhaps more practicable, provision than socially guaranteed levels of nutrition. Further, it is an unfortunate fact that the greatest famine to occur in the twentieth century, in 1959-61 in China, a country whose political system ensures, by Sen's account, "a general concern with eradicating regular malnutrition and hunger through more equal access to means of livelihood, and through entitlements vis-a-vis the state."

Amartya Sen's is a mind of extraordinary power and subtlety, and it is astonishing, therefore, to find him in elementary error when he descends to a mundane level of development theorizing. In his presidential address to the Development Studies Association in 1982, published in the *Economic Journal* and reprinted in this volume, he suggested the "traditional wisdom of development economics" to be vindicated by correlations between investment rates for a large number of developing countries and the growth rates in their gross national product per head. Countries with the highest investment rates appeared as fast growers and those with the lowest investment rates as slow growers. A similar pattern could be discerned in relating growth with the share of industry in gross domestic product. The estimates of investment rates and industry shares refer, however, to 1980, while those of the growth in GNP per head are for the preceding period 1960-80. What the figures appear to be saying, therefore, is that fast economic growth leads to high investment and to industrialization, not (as Sen appears to have concluded) the other way about. Anyone who has difficulty in keeping up with Professor Sen can take comfort from this paper.

Douglas Rimmer

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Fernand Léger's *The Constructors* (1950), an illustration from the new revised edition of Edward Lucie-Smith's *Movements in Art Since 1945* (Thames and Hudson, £3.95).

Back in favour

Chesterton and the Edwardian Cultural Critique by John D. Coates
Holt University Press, £8.95
ISBN 0 8359 4445 5

Past writers move in and out of critical favour like jacksaw, comest obsequy undiscovered laws. Among the public in general, Chesterton has never lost the following his wit and insight gained him in his lifetime. In more academic and literary circles, however, his reputation waned after the First World War and has only recently recovered (thanks perhaps to the *Zelig* effect, but more probably to the Chesterton Review). Instead of being patronized as a religious propagandist, Chesterton is now beginning to receive the attention he deserves as a literary and political

figure. As John Coates points out, however, one of the barriers to his proper appreciation in literary circles is the deceptively relaxed manner which he shared with other great Edwardian writers, but which grates upon contemporary critics, who "prefer an appearance of earnestness, even of agonizing, in fiction or criticism". Dr Coates interprets Chesterton's ideas as a response to a crisis in Edwardian culture, in the early years of the century there was a threat for ideologies, for myths, for new simplifying truths that would make sense of the world. Credos based vaguely upon evolution, influenced by Nietzsche, and embracing the notions of inevitable destiny and the Superman, began to make converts just at the time when the growth of mass circulation newspapers provided Chesterton (himself, ironically, often dismissed as simplistic) because he is so readable, used his great powers of communication to attack these ideologies. In his essays and novels he questioned, mocked and refuted the fashionable simplifications, reaffirming human freedom against inevitable destiny.

equality versus the Superman, the value of limits and clear definition against the metaphysical craving for absorption into the All. Many of the values he reassessed seemed to him securely rooted in popular culture and lost only by the intellectuals, like the sense of adventure and excitement in life, submerged in the nihilistic pessimism of the time. Dr Coates places Chesterton's defence of adventure, as also of myth and of the grotesque, within their cultural context, drawing for example on Miller's theory of myth and on Victor Hugo's grotesque. He argues that Chesterton was not only recovering aspects of life left out of elite culture, but also providing analyses of them, for example by discriminating between the proper place of myth in human thinking and the misleading myths propagated by contemporary gurus.

Chesterton's criticisms of fashionable ideas were certainly read; but how influential were they? Dr Coates argues that he had a decisive influence in at least one important case - in altering the views of A. R. Orage, editor of the *New Age* and influential in the early 1920s.

influence on subsequent thought. More generally, he suggests that the very moderation and sanity of Chesterton's views (for example against progress and for original sin) may have made his influence less conspicuous than that of later writers who stated similar views in more strident tones. This scholarly study, putting Chesterton back within the cultural context that provoked his writing, is a welcome contribution to the growing literature on him. Its main defect (apart from certain infelicities of style - but, alas, which of us can write like Chesterton?) is a rather defensive unwillingness to criticize his ideas, perhaps for fear of giving comfort to those who dismiss him out of hand. Chesterton will not be taken seriously, however, unless students of his ideas are prepared to recognize the points at which he was shallow, confused or mistaken, as well as those where he really did epitomize a dominant sense.

Margaret Canovan

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G. K. Chesterton as seen by Strickland in *Vanity Fair*, 1912.

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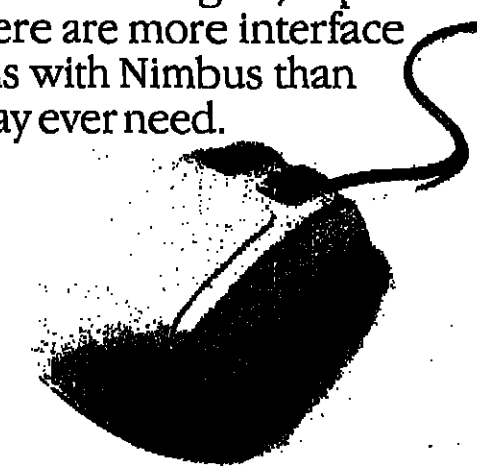
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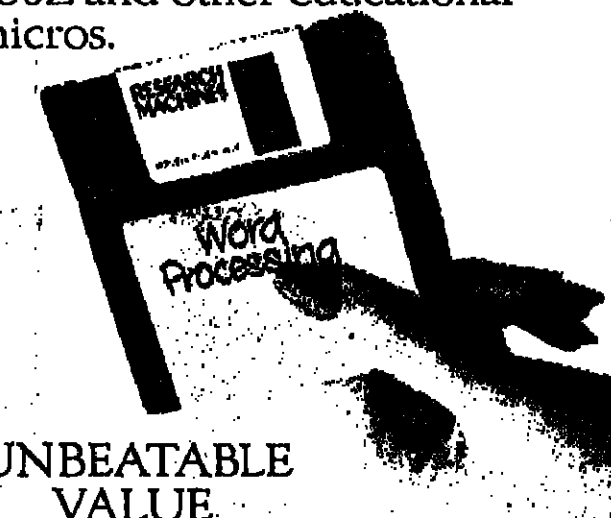
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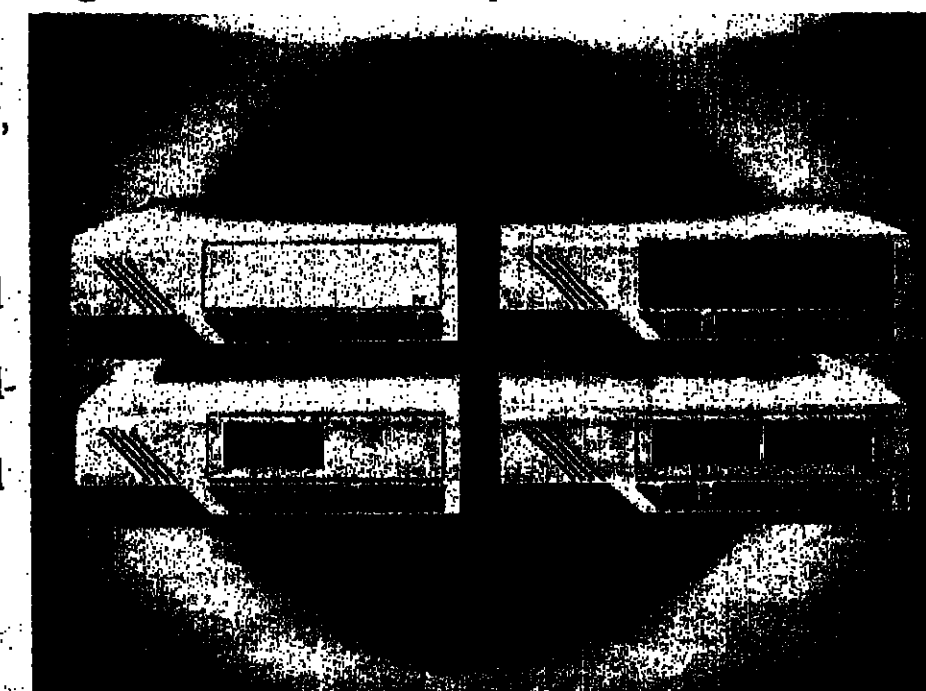
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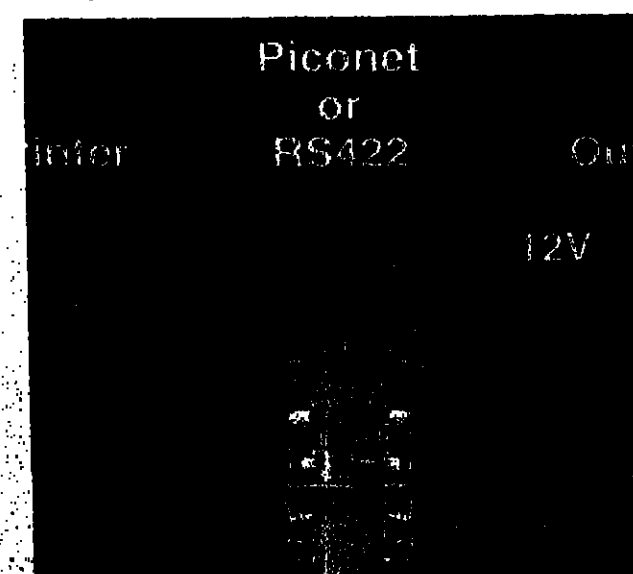
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BOOKS

Britain's colonial fiascos

Trade, Plunder and Settlement: maritime enterprise and the genesis of the British Empire, 1480-1630
by Kenneth R. Andrews
Cambridge University Press, £27.50 and £8.95
ISBN 0 521 25760 3 and 27698 5

The sun may have set on the British empire, but it has certainly risen on imperial history. In the last few months alone we have had Fernand Braudel on the origins of Britain's global hegemony, Professor T. O. Lloyd's account of the rise and fall of her empire, and D. B. Quinn and A. N. Ryan's analysis of its prolonged and painful gestation. Now from Professor Andrews, long known for his magisterial studies of Elizabethan privateering, there comes this excellent book.

Hardly surprisingly the story he tells is in essence a familiar one. The early history of what was to become the world's greatest maritime and colonial power was, to put it charitably, unimpressive. These were the centuries that saw the Portuguese open a sea route to the long-sought riches of Asia; the Spaniards overthrow the empires of the Amerindian Incas and Aztecs; the bounds of Christendom massively enlarged. But at this very time almost all England's oceanic commercial and colonial ventures failed, while for the best part of a hundred and fifty years her seamen were engaged in heroic but futile attempts to sail over the North Pole to the East. Yet when it came to fighting at sea they succeeded with a vengeance. Spain's grand strategy to subdue England and the Low Countries was thwarted in 1588 and the valuable imperial commerce of the Iberian kingdoms seriously damaged under Elizabeth and again under Charles I. But even here not all was well. The wars degenerated into campaigns of privatizing and piracy, increasingly devoid of any direction and dedicated to the ruthless pursuit of private gain. Among their major legacies were a regime of corruption and ineptitude in high places and the eclipse of the country's nascent state navy.

All this Professor Andrews recounts in eminently readable style, his narrative enhanced by copious quotations from that extensive and graphic contemporary literature of sailing the trials and tribulations of Englishmen anywhere from the frozen wilderness of the Arctic to the magnificence and opulence of Mogul India. The author engagingly declares his disillusionment with political parties of all persuasions, and we are thus happily spared both peroxysms of vicious patriotism and the tedium of portentous model building. The writing is lucid, the scholarship exact and comprehensive — though little use has been made of foreign archives other than those of Spain — and the judgements almost invariably sensible and persuasive. Particularly impressive is the author's patient and skilful handling of difficult



A scene from an eighteenth-century Venetian intermezzo painted by Guiseppe de Albertis, reproduced in H. C. Robbins Landon's *Handel and his World* (Weidenfeld and Nicolson, £12.95).

and contentious points. So, for example, he reconstructs from fragmentary sources the original objectives of Drake's 1577 voyage which turned into the celebrated circumnavigation of the world.

Professor Andrews begins by deftly placing England's oceanic endeavours in their European context and by briefly surveying the country's resources for the pursuit of such policies. Their inspiration, he argues, was primarily material, whether in the ambitions of merchants to tap the rich rewards of new markets, or of squires and gentlemen to set themselves up in styles impossible at home — at one stage Humphrey Gilbert parcelled out eight and a half million acres of American soil, over which he proposed to preside as lord and master. Paradoxically enough the initial English attempts at expansion were successful and important. Around 1500 Bristol played a vital role in the search for a northern passage to Asia, and one of Henry VIII's own ships triumphantly showed what the English could do by reconnoitring a great stretch of the American Atlantic seaboard. Also, it might have been added, it was at this time, in part by the use of royal warships, and with the aid of royal diplomacy, that the English made a successful incursion into the immensely valuable trade of the Mediterranean. But by the mid-1500s they were everywhere in retreat — a retreat for which the Tudors, unwilling to clash with the power of Spain, perhaps bore a greater responsibility than the author allows.

Then, in the reign of Edward VI there began another wave of endeavour. Its most dramatic manifestation was in the achievements of English seamen, sometimes in exploration, but more usually in wars which in large measure diverted energies and

resources from ventures offering less prospect of wealth, glory and the destruction of the arch-enemy, Catholic Spain. English merchants indeed established footholds in trades anywhere from Brazil to Japan, but few of these were to endure. Under Elizabeth colonies were planted, and promptly died, in North America. Only in the reigns of her successors did the English eventually successfully settle in the New World, and then very largely since royal policies made life at home intolerable to some of the country's most independently-minded and enterprising inhabitants.

This generally sorry record Professor Andrews carefully and convincingly assesses and explains. He urges, for example, the ineptitude of the gentry involved in the colonial fiascos — and their shortcomings could well have been further highlighted by comparison with the achievements of Spanish conquistadores of less elevated social standing. He suggests that such undertakings were hampered by inadequate or misleading information — but then again such ignorance had not impeded the penetration of South America by Spanish and Portuguese pioneers. And in general he accepts too readily current defence of Tudor statecraft which by its hesitations at both the beginning and the end of the sixteenth century helped to ensure that England enjoyed no such benefits as an able dynasty secured for the far less well-endowed Portugal. This, however, is a matter for debate. Professor Andrews' book will for long remain the standard work on England's imperial beginnings.

Geoffrey Scammell

Geoffrey Scammell is a fellow of Pembroke College, Cambridge.

Friends in business

Men of Business and Politics: the rise and fall of the Quaker Pease dynasty of North-East England 1700-1943
by M. W. Kirby
Allen & Unwin, £15.00
ISBN 0 04 941013 X

Members of the Pease family have long enjoyed a walking-on role in studies of nineteenth-century enterprise. Edward Pease's involvement in the projected railway of the Stockton & Darlington is well known and the family's activities in coal and ironstone mining, iron founding, locomotive construction and banking are frequently alluded to in the monographic literature. In this brief, concentrated book, Dr Maurice Kirby has gathered up these tantalizing fragments and, with information derived from several important collections of private papers, fashioned a clear, straightforward and often fascinating account of the rise and fall of this important dissenting family.

Dr Kirby's story begins when Edward Pease (1767-1858) participated in the financing and promotion of a long-standing project to link the small landside collieries of South Durham to a navigable point on the River Tees which in 1825 became the Stockton & Darlington Railway. Before this there was nothing to differentiate the Pease family from numerous other worthy nonconformist entrepreneurs of the industrial revolution. Edward's predecessors had made money in woolen manufacture and established a modest banking business. Edward built on this

solid foundation and elevated the Peases into the group of established Quaker dynasties, dominated by the Barclays, the Evans, the Gurneys and the Lloyds. By the first decade of the twentieth century, after 80 years of overwhelming influence on the economic and political life of north-east England, the Pease's period of dominance was over. With the death of Sir Joseph Whitwell Pease (1828-1903), following the failure of the family bank and a calamitously damaging lawsuit, the power of the Pease dynasty was irrevocably shattered. Dr Kirby's "Aftermath", chronicling the activities of the members of the family during the first half of the twentieth century, occupies but a dozen pages.

This book is then the story of the Pease family during the nineteenth century. It is notable on several counts. First, like all of Dr Kirby's work, this essentially economic study possesses a political dimension. Altogether 33 Quakers entered Parliament during Victoria's reign and about one third of them can be identified with the Pease interest. "The focal point of the family's political involvement was South Durham and north-east Yorkshire, and within thirty years of Joseph Pease's election [in 1832] the Quakers and their allies had constructed a formidable political machine". Indeed, the Peases exercised a form of urban oligarchical control which was as rigid and all-pervasive as anything exerted by the traditional landed influence which they sought to replace. Second, by carefully examining the decline of "Friendly Discipline" within the family after 1850, the author provides a vivid example of how and when "conformity to the world" developed within the Society of Friends. Third, this study constitutes a valuable addition to the portfolio of local historical studies. Fourth, as a contribution to business history, this essay is unusual in that it analyses the factors which contributed to failure.

It is apparent that Sir Joseph Whitwell Pease made the fatal mistake of sustaining several loss-making enterprises with which the family were heavily involved — such as Henry Pease & Co (the original Darlington woolen mills on which the family fortunes were based), the locomotive-building firm of Robert Stephenson & Co of Newcastle upon Tyne, and the iron-making firm of Wilsons, Pease & Co — from the resources of their private bank, J. & W. Pease, long after their interest in these companies should have been liquidated. This mistake was compounded by a grotesque and tragic error of judgement in handling the affairs of his ward, Beatrice, the daughter of his brother Edward. The luck which seems so often to have played a major part in economic success suddenly deserted the Pease family.

It may confidently be predicted that this aspect of the story will be used to illustrate many future inquiries into the quality of Victorian enterprise and often fascinating account of the rise and fall of this important dissenting family. Dr Kirby's story begins when Edward Pease (1767-1858) participated in the financing and promotion of a long-standing project to link the small landside collieries of South Durham to a navigable point on the River Tees which in 1825 became the Stockton & Darlington Railway. Before this there was nothing to differentiate the Pease family from numerous other worthy nonconformist entrepreneurs of the industrial revolution. Edward's predecessors had made money in woolen manufacture and established a modest banking business. Edward built on this

P. L. Payne

P. L. Payne is professor of economic history at the University of Aberdeen.

BOOKS

A sense of history

Hawthorne, Melville, and the American Character: a looking-glass business
by John P. McWilliams Jr
Cambridge University Press, £19.50
ISBN 0 521 25900 2
The Province of Piety: moral history in Hawthorne's early tales
by Michael J. Colacurcio
Harvard University Press, £26.40
ISBN 0 674 71957 3

"There is properly no history", wrote Emerson, "only biography". Many critics of American literature have taken Emerson at his word. As a result, American writers tend to be seen in a vacuum, unframed in any vital way by local, temporal pressures; and American texts are usually read, even now, as if they were timeless parables of the national character, in which every historical fact functions only as a symbol of some ahistorical truth.

These two books are part of a movement that has gathered strength over the past few years, and that aims to redress the balance by putting American writers back into American history. In John McWilliams's case, the emphasis is upon the lifelong interest Hawthorne and Melville showed in the nature of the American character. Both were historical novelists, McWilliams insists, in the sense that they were preoccupied with the development of national identity through historical time, and analysed what they believed to be the emerging ideology of the new nation from the standpoint of the sympathetic yet detached observer.

With Hawthorne, McWilliams's aim is to reveal just how deeply interested the writer was in the evolution of the New England character: the changes that occurred to it from one generation to the next, and its implications for the national future. The tales and romances are discussed in order of their place in New England and American history, on the assumption that this is the chronology that matters in Hawthorne's case; since, as Henry James put it, "his mind is so far as it was a repository of opinions and articles of faith... had no development that is of especial importance to look into". Arguable though this assumption is, it does enable McWilliams to emphasize the historicity of Hawthorne's imagination; the way in which Hawthorne came to see his characters in organic relation to their historical world and develops his themes out of historical dialectic. And it also gives him the chance to demonstrate in detail just

how subversive of conventional historical assumptions Hawthorne could be: for instance, how, in treating of the beginnings of American puritanism, he selected detail and shaped perspective in such a way as to undermine his contemporaries' historiography.

In Melville's case, McWilliams approaches things differently. Believing, quite rightly, that Melville's work depends far more than does Hawthorne's on its context in a writing career of exceptional volatility and change, he looks at the texts in order of their place in the history of the author's imagination: an approach that allows McWilliams to trace the author's progress from a millennial prophecy to apocalyptic gloom. The dramatic alteration that took place in Melville's attitude towards the story of America is neatly summed up by two remarks McWilliams quotes. "Call him an American and have done", declared Melville of Hawthorne in 1850, "for you cannot say a nobler thing of him". "Intrepid, unprincipled, reckless, predatory", he wrote just five years later, "with boundless ambition, civilized in externals, but a savage at heart, America is, or may yet be, the Paul Jones of nations".

Michael Colacurcio's focus is narrower than McWilliams's, but correspondingly more intense. Concentrating on the early tales and sketches, he aims to demonstrate that Hawthorne was neither a neo-Calvinist, as Melville evidently believed, nor an aesthete,

Resting in obscurity

The Life of John Hamilton Reynolds
by Leonidas M. Jones
University Press of New England,
£30.00
ISBN 0 87451 293 X

In 1822 John Hamilton Reynolds (1794-1852) wrote: "What am I looking for? ... when half a century will set myself and any given dead idiot on a par?" Though he supported himself in the insurance business from 1810 to 1816 (and much less successfully) in legal practice from 1817, it was his literary exertions which were the object of Reynolds's pained self-questioning.

As a serious poet — which is what he most wanted to be — Reynolds managed little more than secondhand work in the styles of Byron, Wordsworth and Keats, among others. In his critical biography Leonidas M. Jones strains to shed favourable light on Reynolds's poetry, but is repeatedly thrown back on apologetic formulations. Of Reynolds's prose, Wordsworthian "Margaret" (1816), he writes, "imitative though the poem is, it shows firm craftsmanship". Reynolds did once turn his facility for poetic imitation to fine and lasting effect. In 1819 he

published a verse parody of Wordsworth's *Peter Bell* after the original poem had been announced but before it actually appeared. The burlesque spirit and the journalistic flair evident in the production of the spurious *Peter Bell* frequently converge in Reynolds's prose, which constitutes the more noteworthy dimension of his literary output. A sharp dramatic critic (1816-1817) for John Scott's *The Champion*, Reynolds became a prolific contributor to such periodicals as the *Edinburgh Review*, the *London Magazine*, the *Westminster Review* and the *Athenaeum*. But though Reynolds's prose was associated with that of Hazlitt and Lamb he never, and has never, consolidated a position as one of his age's geniuses of letters. Eventually, his attempt to combine writing with the law proved insupportable. Bankruptcy overwhelmed him in 1838; his legal practice ceased with an acute perception of his own limitations and when at last, after failure and he lived out his last years as assistant clerk to a county court in the Isle of Wight.

Yet Reynolds is remembered today and for a reason he himself foresaw when in 1818 he wrote to Keats: "Do you get Fame and I shall have it in being your affectionate and steady friend." The famous friendship lasted from 1816 to Keats's death in 1821 and Professor Jones has performed a useful task in retelling the story from Reynolds's side. Reynolds's energetic championing of his friend's reputation is documented — as is every other activity and circumstance of

as James suggested, but a "moral historian" who tried to recreate the emotional and cultural contexts in which earlier generations of Americans lived their lives. Hawthorne, Colacurcio argues, did not imbibe puritanism with his mother's milk. He conscientiously studied it; having done so, he then set out to "re-cognize" the authorial intentions of writers like Cotton Mather and to "re-enact" the past, particularly its inner dramas. As Colacurcio acknowledges, R. G. Collingwood is an important intellectual presence in this book. For Hawthorne as Colacurcio sees him is not far removed from Collingwood's notion of the ideal historian: someone who uses patient research to recover the facts of the past and sympathetic re-enactment, an act of the imagination, to resurrect its inner life. The only significant difference is that Colacurcio allows more room for imaginative play: the "moral historian", he suggests, relies when re-enacting the past, not on the verifiable certainties that science requires, but on those laws of imaginative probability that are the guide for every writer of fiction, and that we commonly depend on when speculating about other people's desires and intentions.

As Colacurcio admits, his approach to Hawthorne is partial and selective. Historical readings are favoured to the exclusion of all other possibilities, and of the 70 or more tales that Hawthorne published between 1830 and 1838

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Leigh Hunt once commented to Hazlitt that "Reynolds is a machine I don't see the meaning of". In its don't see the meaning of, it is his concentration on the outward aspects of Reynolds's life Professor Jones's biography, though its sympathetic motives are never in doubt, offers few insights into the inner meaning of its subject. The relentless recording of fact evades imaginative engagement with a man who seems, for all his ambition, to have struggled throughout with an acute perception of his own limitations and who, at last, after failure and defeat, towards the end of his life Reynolds spoke of himself as one who had "walked through life with a skeleton of reputation without a particle of name" and in 1848 he wrote to Keats's biographer Monckton Milnes: "Forgive me so much about that poor obscure — baffled Thing, — myself"

Aidan Day

Dr Day is lecturer in English literature at the University of Edinburgh.

Pursuit of topical allegory

Poetry and Language in Dryden's Poetry: the arts of disguise
by Steven N. Zwicker
Princeton University Press, £25.00
ISBN 0 691 06618 3

This intelligent, carefully argued book is in several ways a reflection of its times. One could hardly imagine its appearance in the midst of the passionate idealism of the 1960s, or indeed in the heyday of the doctrine of aesthetic autonomy, when writers were expected to be like God, parting their fingernails. To Zwicker, literary works are by-products of history, and authors are to be praised for tough-mindedness, the efficiency with which they serve their political masters and tune their verbal engines to fulfil concrete ideological tasks, or, in Hammett's terms, to "the common language".

Penelope Wilson

Dr Wilson is a fellow of New Hall, Cambridge.

There are also introductory essays on poetry, drama and the novel, and discussions of all the major periods in literature.

As a product of a new historicism, Zwicker's book is methodologically



Nathaniel Hawthorne

sophisticated, well-informed, scrupulous in its scholarship. The aim of understanding an author in his historical context is commendable, and such an approach is particularly appropriate to an author as alert to occasion and audience as Dryden. The book is well-written, carries its considerable learning lightly, and provides challenging and fresh readings of a number of poems. But it pushes its thesis so hard that the ultimate effect is less than satisfying. The relentless pursuit of topical allegory throughout Dryden's writings is reductive: too often we are conscious of the hammer blow of the thesis, knocking inconvenient edges off a poem.

Zwicker's method works quite well in a sensitive, illuminating commentary on *The Hind and the Panther*, where, as Zwicker shows, Dryden faced the delicate problem of distancing himself from James II's unpopular policies while seeking to reinterpret recent history to make the feared Catholics seem a party of moderation. There are also interesting commentaries on several of Dryden's later works, the *Fables* and the translation of Virgil, showing topical and political elements not previously noted. Even here one feels a certain tendentiousness, which becomes positively disabling in the accounts of *Abdolon* and *Achilles* and *Religio Laici*, both of which are treated as simple exercises in royalist propaganda, with no dimension beyond "political strategy". To point out a political dimension in the theological arguments of *Religio Laici* or to suggest that the stance of moderation and disinterestedness in *Abdolon* is carefully chosen for maximum persuasive effect is entirely legitimate and salutary. But to claim that the "opinions" of *Religio Laici* "exactly mirror those of the king" — that theological dispute is coded "royal" politics, that nearly everything the poem appears to be saying is mere pretence and that what Dryden is really doing is "to argue the King's case" by violently attacking sectaries, borders on obsessiveness.

Dryden criticism, from Bredvold (1934) to Harth (1968), has used the methods of intellectual history in seeking to demonstrate the unity of Dryden's thought, finding a pattern of consistency in his advocacy of order and tradition. In Zwicker's version, a Dryden for the post-Watergate 1980s, ideas are dissolved into rhetorical plays and success in art and politics is a matter of skilful dissimulation. "The latter seventeenth century thrived on deception; its politicians understood that after civil war and political revolution, deception would enable men to approximate civil stability. In the days when poets could be called the unacknowledged legislators of the world, truth used to be brought a positive value; in the brave new world evoked in this passage, truth becomes a mere counter, and deception is embraced as the norm."

Warren Chernaik

Dr Chernaik is senior lecturer in English at Queen Mary College, London.

Winning rights

Women's Suffrage and Social Politics in the French Third Republic
by Steven C. Hays with Anne K. Kenney
Princeton University Press, £42.50 and £11.50
ISBN 0 691 05427 4 and 10167 1

The history of women's suffrage during the Third Republic is one which makes the French experience exceptional. In more than two dozen states women had received partial enfranchisement by 1914. Of the two European great powers that went to war in 1914 only France had not given women the vote by 1919. By the 1930s women were voting in Eton and in parts of British East Africa but, as the French

suffragettes and their supporters did not hesitate to point out, they were not voting in the land of Joan of Arc and the Declaration of the Rights of Man. It was not until April 1944, with France still under German occupation, that the Committee of National Liberation in Algiers announced that women would vote in the postwar elections. It is as puzzling to explain the delay as it is to explain the sudden decision of General de Gaulle in 1944. With regard to the latter, it has always been supposed that with the appearance of a new Catholic party and with fear of Communist strength, it was assumed that women would vote for the Catholics and against the Communists and that they were welcomed as a moderating influence. But it could be that the role of women during the German occupation made this a resistance demand which was difficult to refuse. While it is also possible that General de Gaulle, with his eye on continuity, was anxious to associate himself with the decisions of the Chamber of Deputies,

which had voted several times in favour of women's suffrage, only to be defeated in the Senate. The authors of this book, in their conclusion, explain the slow progress of the French towards women's suffrage in various ways. One is because France was a largely Catholic country, whereas those pioneering states which granted women suffrage admitted limited, were predominantly Protestant. The argument is that Protestant countries did not have to fear "a government of priests", while in a Catholic country there was supposedly the danger of the priest dominating the women, and therefore the family, from the confessional. The greater individualism of Protestantism also encouraged different forms of feminine activity. French Protestant women were more active in philanthropic and social work, while Catholic women who wished to dedicate their lives to helping others could always choose to enter a convent.

There is clearly some sense in this

argument as an analysis of the political geography of support for women's rights shows, since departments with large Protestant minorities gave the strongest support to women's suffrage. But other reasons must be sought. The importance of Paris meant that there was an undue concentration of power and influence in the capital, whereas the movement was only weakly represented in the provinces. It was natural that women who felt isolated in unsympathetic surroundings should be attracted to the supportive kindred spirits and the more glamorous activities that were to be found in Paris. Also, the authors tell us, the well-educated, well-dressed and well-behaved women who belonged to the *Union française pour le suffrage des femmes*, or the *Conseil National des femmes françaises*, had little contact with the life of most French women. This last is an issue which might have been more fully explored. In the debate upon whether the First World War accelerated or retarded the win-

ning of women's rights, it would have been interesting to have examined the activities of those women who went to work in munitions factories. Their experience of the war, their proximity to munition workers because they were not in danger of being sent into the trenches. They could protest too because they had been given specific promises about working conditions and about provision for their children. But this was part of the tradition of social protest and was distinct from any movement which called for feminine solidarity, irrespective of class. There is much information set out in this well-researched book, but there is still much to say about women in French society.

Douglas Johnson

Douglas Johnson is professor of French history at University College London.

BOOKS

Power valves

A Basic Guide to Power Electronics
by Albert Kloss
Wiley, £19.50
ISBN 0 471 90432 5

Power electronics has emerged as a wide-ranging discipline during the past 25 years. It began with the arrival of the thyristor (a solid-state, electronically-controlled switch, capable of carrying large electric currents), and received further impetus when transistors moved beyond the signal handling levels required for communications and became capable of operating at the sort of power levels needed for motors in industrial drives.

These developments caused a minor revolution in the activities of electrical engineers, who had previously not simple way of controlling the flow of electrical power smoothly and efficiently. Methods which worked well at low powers (for example, the use of vacuum tube "valves" in radios) could not be scaled up and applied to industrial processes, because, quite apart from the cost of the wasted energy in the valves, it was simply not possible to keep them cool. Instead, various forms of bulky rotating machinery, and later mercury-arc rectifiers, were used to regulate the flow of power, and convert from alternating current to direct current.

The new solid-state, power-handling devices transformed things dramatically, and ushered in a new era of efficient and sophisticated control across the whole spectrum. A striking example of what can now be achieved at the highest power levels is the new two million kilowatt link across the English Channel. Power flow in either direction is controlled via two thyristor converter "valves" (a delightfully descriptive name, which survives in this one area long after its disappearance from the electronics scene). One on each side of the channel, they carry direct current power, while the British and French grid systems are of course alternating current. At times, when the British system can export power economically, the British alternating current is rectified by the thyristors on this side, and inverted back to French alternating current at the other side. At other times the power flow is reversed, the whole process taking place smoothly under electronic control, and with only modest loss of power. Operation on such a scale would have been unthinkable without power electronics. At the other end of the scale, thyristors are used in domestic light dimmers, and transistorized speed controllers for

domestic and industrial motors are now commonplace.

Power electronics is now a wide-ranging discipline, bridging the gap between conventional electrical (power) engineering and electronics, and providing scope for ingenuity and innovation at many levels. Graduates with experience are much in demand in industry, and recognition of this is reflected in the increasing number of institutions which now offer power electronic courses. Tests are not abundant, and this new addition is outstanding. It is not, however, a basic guide to power electronics, but an authoritative treatment of naturally commutated thyristor converters. This forms only a part (admittedly a major and important one) of the whole subject, and certainly merits the in-depth coverage provided by this English translation of the German original.

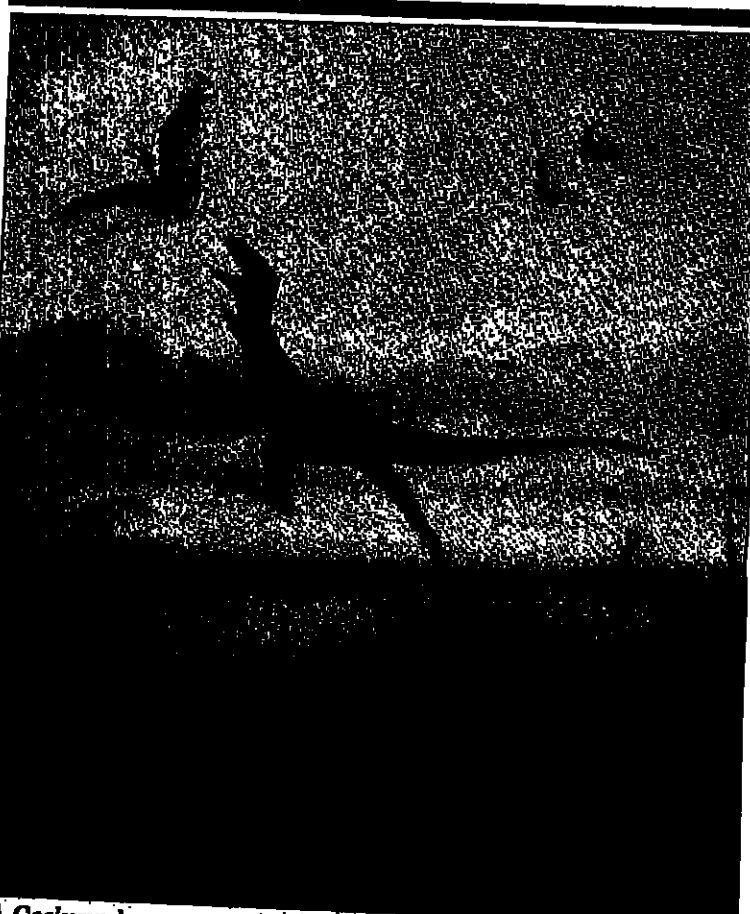
Non-specialists will be disappointed by having their expectations dashed by the restricted range of material covered. More seriously, committed specialists will not proceed beyond the title. This is a great pity, because the book is a comprehensive reference work, which could be of great value to academics and practising engineers. The author is an engineer with long experience in the field, and this comes over clearly both in the flavour and in

the unusual emphasis laid on the use of diagrams as an aid to physical understanding. In the preface, it is even suggested that as a first step the work may be used as a picture book. With 172 figures, most of them occupying more than half a page, and many so packed with information that they take minutes rather than seconds to absorb, this claim is not much of an exaggeration.

Many awkward topics not covered in lesser texts are dealt with comprehensively — fault conditions, switching transients, supply interaction, protection, and cooling all being given appropriate weight. Although the ordering is sometimes eccentric, and occasionally the pursuit of thoroughness obscures key points of relevance, patience is ultimately rewarded, as times with shafts of startling illumination, and occasionally with (perhaps unintentional) humour. An author close enough to his subject to be prepared to proclaim "the converter valve fundamentally exhibits a tendency to self destruction" clearly warrants serious attention.

Austin Hughes

Austin Hughes is senior lecturer in the department of electrical and electronic engineering at the University of Leeds.



A *Coelurus* leaps at a pterosaur that flies too low. From Jane Burton and Dougal Dixon's *The Age of Dinosaurs: a photographic record* (Sphere, £5.95).

Coded messages

Microchip Mathematics number theory for computer users
by Keith Devlin
Shiva, £12.95
ISBN 1 85014 047 2

In recent years there has been a huge increase in the number of people working with and playing with computers, many of whom have discovered a fascination in the number theory which underlies computers. This splendid book, aimed at such people, will not only give pleasure to "recreational" mathematicians, but will also instruct the serious student.

Although this is a mathematics text, Devlin has taken great care to ensure that it is genuinely accessible to the non-specialist. There is an elementary chapter on "prime" numbers, which explains how to find them by the sieve of Eratosthenes, and so on. There is a careful explanation of the method of mathematical induction; the Euclidean algorithm is explained at length; and congruence and modular arithmetic are also introduced in a fairly elementary way.

Devlin writes well and knows how to capture his reader's interest. For example, he introduces the modular number

theory with the problem: "A man puts one pair of rabbits in a certain place surrounded by a wall. How many pairs of rabbits can be produced from that pair in a year, if the nature of these rabbits is such that every month each pair bears a new pair which comes from the second month on becomes productive?" He also enlivens his text with anecdotes — usually about famous mathematicians — and by always having a surprise around the corner: it is nice to learn, for example, that Fermat's last theorem of modern number theory was "first published any of his results"; and it is surprising to learn that computers have difficulty in generating random numbers, but Devlin shows just how tricky this is.

From simple beginnings we are led skilfully into much more complicated mathematics with subjects like the efficiency of algorithms, other ways of citing of all secret coding. The more theory in general is undoubtedly rapid, communication, by electronic means is vital in some areas of modern life. In these worlds secrecy is often as important as speed, but anyone sending such a secret message must assume that the "enemy" will pick it up, so how can the message be coded in such a way that the enemy cannot break it? The problem is that modern computers can perform subtle mathematical operations

on coded messages to break codes of the traditional kind. Devlin explains how modern computers also provide the solution to the problem they have created — through the Public Key Cryptography System (PKCS). PKCS uses "very large" prime numbers. Now although the sieve of Eratosthenes provides a theoretically adequate test for deciding if a number is prime it is not a very practical or efficient one; even on a modern "fast" computer, testing a 50-digit number by that method could take 100 billion years. Since numbers with about 60 digits are required for PKCS, other more efficient tests for primality became necessary and Devlin explains several of these. So far as pure mathematics is concerned the efficiency of an algorithm is of very little interest, but for actual computing it is of the greatest importance. For example, the Chinese remainder theorem provides a very efficient way of doing arithmetic with large numbers. And Devlin explains this too! Indeed, efficiency is a recurrent theme.

The book contains a large number of instructive exercises in number theory and in computer programming. It can be strongly recommended to anyone interested in "micro-chip" mathematics.

Alec Fisher

Alec Fisher is lecturer in philosophy at the University of Bath, England.

Precocious chicks

The Growth and Development of Birds
by Raymond J. O'Connor
Wiley, £20.00
ISBN 0 471 90345 0

In his book Raymond O'Connor, director of the British Trust for Ornithology, has provided us with an account of the changes in morphology, physiology and behaviour with age in birds. Although the young of some species of birds hatch from the eggs in an even less advanced state than human babies (for example, with their eyes still closed), at the other end of the avian spectrum the young of the Australian megapodes hatch in such an advanced condition that they are able to burrow upwards, out of the mound of sand that covered the eggs and formed their nest, and fly away. They are aptly termed "super-precocial".

This great range of variation in the state of development of the chicks of different species at hatching is matched by variation among species in rates of chick growth, acquisition of the ability to regulate body temperature, and expression of particular patterns of behaviour. Dr O'Connor interprets these interspecific differences as evolutionary adaptations, linked to differences in ecology. He thus adopts a similar approach to that used by David Lack more than a decade ago in his book *Ecological Adaptations for Breeding in Birds*.

While Lack's book provided one of the platforms from which the present book sprang, much new information has become available in the intervening years, and O'Connor's scholarly book reviews the literature thoroughly

make them as light as their function permit. The advantage of this structure is well known, but a less strikingly shows that bones at risk from impacts should have thicker walls relative to their diameters than those subject only to static loads. The bones should be shaped at joint Where should muscles be attached to the best athletic performance? The can curving shafts and well-placed muscles serve to reduce stresses in bones, and are such mechanisms that Curry discusses all these questions.

It would be difficult to specify an ideal strength for a bone, even if its function were known precisely. This is because loads on bones are to some extent unpredictable. The probability of failure, with the consequent possibility of fracture, must be balanced against the cost of excessive weight, to discover the optimum strength. This is the basis of the theory of skeletal safety factors, which Curry discusses in fair detail. Another chapter discusses the puzzling question of the mechanisms that shape the shapes and dimensions of bones to the loads imposed on them. What signals make sure that bone is added where it is needed and removed where it is not, weakening the bones of astronauts during their escape from gravity and strengthening the bones of tennis players?

Professor Curry has written a book for students, for research workers, and for general readers with some scientific knowledge. He tells us that he has been to sleep a middle course between the alarming mathematics of some authors and the vague hand-waving of others. In general, he has succeeded well. Although he has not mastered mathematics, he has kept it simple and has presented it in an informal way. There is some surprisingly complicated stuff about anisotropic materials in the first chapter, but there is little else to alarm the timid. Regrettably, however, this has been achieved at the expense of some loss of mathematical elegance.

The book is full of penetrating insights, many of them based on Curry's own distinguished research. It is remarkably wide-ranging, a splendid and original introduction to a fascinating subject.

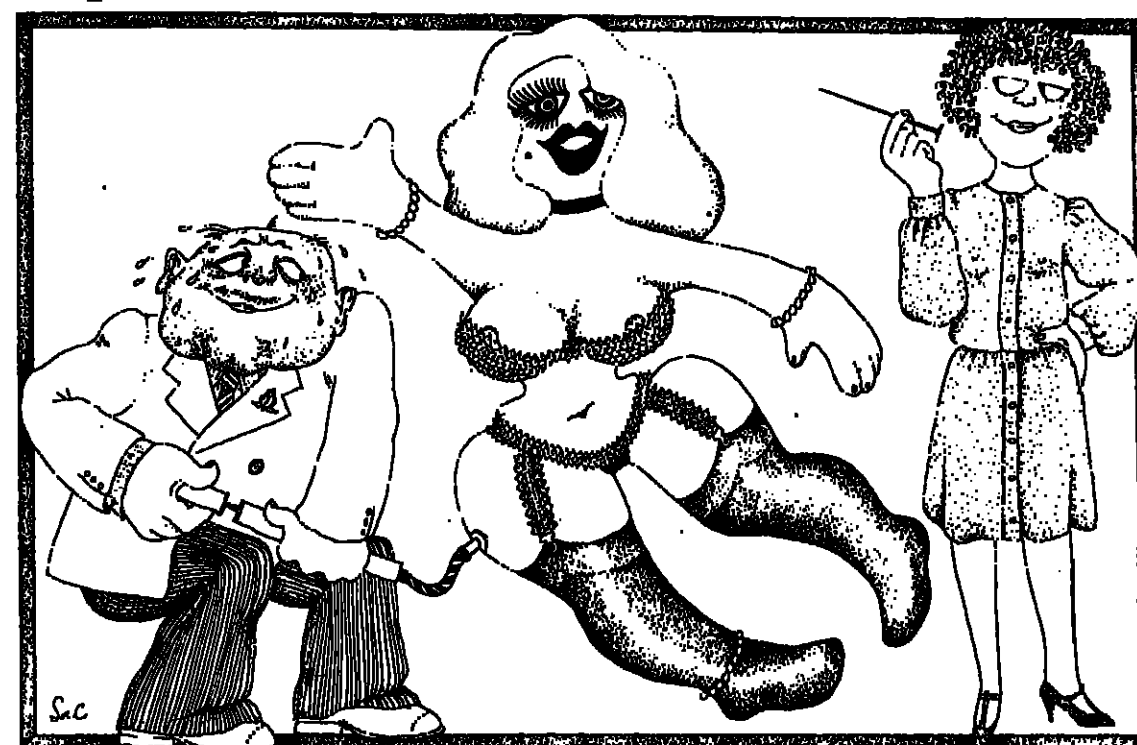
R. McNeill Alexander

R. McNeill Alexander is professor of zoology at the University of Leeds.

The Herbert Spencer Lectures 1982 have been edited by Vernon Bogdanor and published as *Science and Politics* by Clarendon Press (Oxford University Press) at £10.95.



Women's studies



In the view of others

Twenty years ago Betty Friedan and Juliet Mitchell opened the door on feminist ideas and provided a foretaste of what was to come. That there was something wrong for Women (rather than that there was something wrong with women) was the thesis of both *The Feminine Mystique* (1963) and *Women: The Longest Revolution* (1966).

But that's where the similarity ended. For although the writers were concerned for women, and were clearly feminist, their very different starting points and vastly different explanations of the world, and women, rendered them poles apart. It is quite probable that the ideas of these women were so different they would have been unable to agree on the nature of the world they were describing, let alone women's place within it.

Yet they were both feminist theorists. Today, the writings of both are numbered among the "feminist classics". So what is this feminist theory? How can such different frameworks be incorporated into an overall body of knowledge, even a discipline called "women's studies"? And perhaps more important, is such a multiplicity of ideas and explanations nothing other than a disordered mess (yet another example that women can't get their act together), or does it represent a significant new methodology?

There is considerable evidence that it is the latter, that feminist ways of accounting for the world are able to provide more coherent and comprehensive explanations than many of the methodologies which feminism critiqued, and rejected. The achievement of contemporary feminist theory is that it does have a distinct unity and identity while still encompassing a substantial — and at times, conflicting — differences within it. And this diversity is not the consequence of confusion; it is a response to the realities of women's situation.

One of the motivating forces behind the development of feminist theory was the need to validate women's experience. The recognition that women were noticeable by their absence from accepted knowledge and social meanings, provided an impetus for women to start "charting the territory of their unmarked experience". In the process they found that there were numerous aspects of women's realities which were shared, but which had been suppressed.

Women came to realize that the dominant sex had the dominant meanings — which helped them to remain dominant. Everywhere, it was men's view of the world which prevailed, and that included men's view of themselves and of women. It was men who decreed who women were and what they wanted to keep them happy, and men made these pronouncements with an eye to their own self-interest. So as early as 1963 Betty Friedan was asking by what right did one half of humanity make the rules for the other half? By what right did men dictate that women were fulfilled in the home, for men

Dale Spender argues that feminist theory represents a significant new approach

Fred to the male editors of the women's magazines, this was men's verdict. By what right did men decide that the well-adjusted woman was the one who conformed to men's measurements and met men's needs?

Women, insisted Betty Friedan — echoing the words of Mary Wollstonecraft from almost two centuries before — women should decide for themselves. What they wanted and how they would be fulfilled. It was not for men to speak for women; it was for women to speak for themselves.

And because women's position was very different from men's, because women had to contend with male power in a way that men did not, women began to speak out and presented a markedly different view of the world from the one put forward by men. It was a world view in which "woman" was the starting point and to which all else was related. This was in sharp contrast to the patriarchal reality in which "man" was the reference point, the "norm", against which humankind had been measured.

So feminist theory is distinguished not by content, but by its initial assumptions — its world view. (Those who confine feminist theory to content "simply about women" or "women's issues" are mistaken, for feminist theory has the same range as the patriarchal theory it seeks to qualify.) Feminist theory claims for women the same right that men have enjoyed for centuries — the right to explain and define the world from the position that one occupies within it. Men have detailed the world from their position of dominance; women now seek to describe and explain the world from their position of subordination.

Paradoxically, it is by providing that very documentation of their own reality that women undermine the structure of dominance and subordination. If and when the realities of both sexes enjoy equal representation and validation, the structures of dominance and subordination will have been transformed.

Hence the emphasis on women's voice in feminist theory. The right to describe one's reality, to be heard and taken seriously. And this means all women. For as surely as men have no right to speak for women whose experience is different from their own, so too could no one group of women speak for another group whose experience they did not share. Feminists have not wanted to do unto other women what men have done unto women.

The demand made of feminist theory is that it accommodate the realities of women's existence — when not all women live the same life. And it is an achievement of feminist theory that it has risen to this challenge, that it has developed the ways and means of allowing the coexistence of diverse and even contradictory accounts of women's experience.

The injustice — and the absurdity — of trying to account for women's existence by recourse to any one form of analysis or any one explanatory framework is amply illustrated by reference to abortion. In the name of reproductive control, white middle-class women demanded that abortion be made more readily available; at the same time and in the same name of reproductive control black women demanded that the "availability" of abortion be drastically reduced. For while to white women abortion represented another option in the attempt to control their own bodies, to black women who were undergoing enforced abortions, it represented quite the reverse.

So what is the feminist position on abortion? Well, it depends. And with so many other seemingly straightforward feminist questions the answer is — it depends. By such means feminist theory encompasses a range of diverse explanations; it retains its "feminist perspective" while it allows exploration of the multiple meanings of women's lives. This differentiates feminist theory from most other theoretical frameworks.

No one suggests that it is easy to maintain this multi-dimensional approach. But few are the feminists who think it not worth trying. And for two decades now, when there has been what is referred to as "an explosion in feminist knowledge", feminists have made a rigorous effort to ensure that the knowledge they generate includes, rather than excludes, the differences among women. They have tried to ensure that these differences do not become a further source of inequality, a replication of the model of dominance: subordination against which feminist theorists rebelled. So feminist theory which has no one method, no single issue, and no simple "cause and effect" framework of analysis, has taken a significant step in the attempt to account for the complexities of human existence.

How then is feminist theory evaluated? It can be dismissed as a venture of "crazy" women (when the dismissal of "crazy" women was one of the reasons for its emergence); or it can be seen as a theoretical achievement, one which offers new means of exploring human existence and of generating more comprehensive knowledge about the world.

It all depends.

Dale Spender is the author of a forthcoming book *For The Record: The Making and Meaning of Feminist Knowledge: The Women's Press*.

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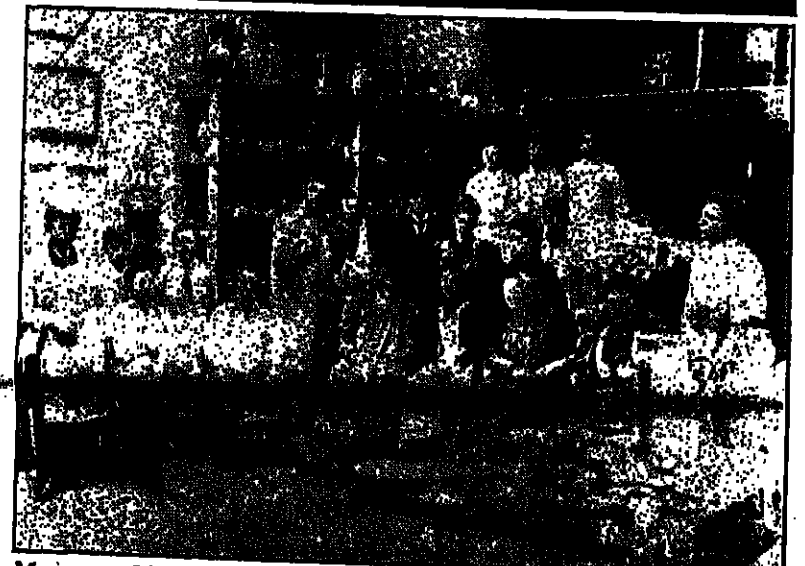
TIMES EDUCATIONAL SUPPLEMENT

March 1985
EUROPA PUBLICATIONS £9.75
18 Bedford Square, London WC1B 3PH

Women's studies

Judy Attfield looks at the perception of women in design history

Defining the object and the subject



Margaret Macdonald Mackintosh (top), who with her husband Charles Rennie Mackintosh formed the nucleus of the Glasgow arts and crafts movement. Della Robbia pottery workers (above) c 1900.

There is enough existing literature, particularly in areas such as social history and sociology, and certainly in art history, to testify to the legitimacy, interest and need for a feminist practice in history. In design history, still an unestablished discipline struggling to free itself from the status of minor applied art history, there has already been a bid for a women-in-design point of view. Because design history is to some extent still up for grabs, the issue has particular pertinence.

The problems of defining the object of study and finding an appropriate historiography have been fraught by design history's art attitudes and precedents. In attempting to assert itself, design history has sought to establish its distinctness from art history by defining its object of study as the useful or functional object instead of the merely beautiful. The problematic part of the argument has been in deciding whether the object of study should be the product of mass production or the handmade (craft/applied art) useful object could also be included.

What does not enter into this type of debate is how do you deal with the mass-produced, non-functional object exemplified in the controversial areas of fashion, taste and ornament. There is a tacit understanding that this, no matter how relevant in terms of popularity, has no place in serious discussion, revealing what a functionalist approach of this sort conceals: a primary concern with aesthetics. The ethics of beauty and the expertise of recognizing and categorizing formal characteristics (historic styles) do not consider the preferences of the public in matters of taste or convenience, nor the relationship between a product, the material it is composed of and the technology of its production and distribution. We don't have to look very hard to note that design history hasn't in fact managed to kick the art habit yet.

Those who favour the women-in-design view, by which I don't necessarily mean the women-in-design view, are reluctant to recognize the debt to the minor role of applied art they are forced to take up if rejected by design, because by so doing, it removes an area from design history in which women can be shown to have been very active. This is only one facet of an ongoing debate about what should be the appropriate object of study of design history generally, to which the women-in-design pitch has attached itself.

It is quite understandable in view of the bid only to call design those products and processes which are the result of the division of labour, the industrial factory system. This is seen by some as a male attempt to appropriate design history by excluding traditional female areas of design practice such as homestead textiles. But it is not enough to identify the areas in which women excel and make sure that they are not excluded from the territory of the discipline. All that remains to be done then is to "discover" the unrecognized designers. This method can in fact be construed as reinforcing and perpetuating the gender divisions between what are traditional male and female areas of interest and expertise in practising design, in writing its history and in lecturing on art and design courses.

If the object of the exercise is to get a second straight to show that women have managed to succeed in becoming highly successful professional designers and that many more women practise design but cannot be acknowledged because they are not professional, then there is good reason to start with a women-in-design approach. But my contention is that this is only a symptom - that a feminist practice of design history should not be satisfied, nor stop there. With the growing pressure to include more "relevant" practitioners in the academic ingredient of art and design courses, many women lecturers' scolding, in the more "craft" side of design such as textiles and ceramics would be cut out if design history were only to include industrialized products and processes.

It is quite difficult to find many women designers involved in industry "discovery". The fact that few, engaged (male or female), who may have had to do with designing (but not the aesthetic) are not necessarily celebrated either in the history of design or in the history of the design of the object. One could

intelligence or real work. These are unsuccessful attempts to explain the woman's touch as myth, by saying that it doesn't only apply to the transformation of house into home, but that it can be shown that women have been good industrial designers and that it is only lack of opportunities and social pressures which did not allow women to preserve. But I find that as uncomfortable as the assertion that "... by the end of the First World War women had sufficiently infiltrated the world of design to be able to take an example with male designers in the new movements, schools and professions opportunities which they sought".

The main objection I have to the women-in design stance is that it tends to take on feminism but it colludes with the traditional function account of design history which deals with the concept of a clearly conscious of a new type of woman. There is little doubt that it is important to speak about women as designers and to mention their work as part of their contribution but I find the practice of history of design or to consider the contradictions and the cult of being a woman and a designer, or an historian or a consumer, doesn't reveal enough just to say the "great" designers and neglect the social, cultural, economic and technological conditions of the time. The even more to the point, a female practice of history cannot only look itself with the "object of study" of which there is much more to say than has been touched on here; it must also account of the "subject of study".

As Bourdieu puts it: "The object of study is always bound to remain partial, and therefore false, so long as it fails to include the point of view from which it speaks".

If we take on feminist practice in position where we identify with a group and in which we can give a gendered voice to look at history in a different way. Hopefully in a way which might take account of some of the problems which a more conventional design history cannot, such as the questions around design and popular taste and the culture of everyday life. We must be alert to the danger of an historicism which accommodates women's place in a male world as natural. As a woman historian with a commitment to feminism it is not necessary to speak for "all women" in order to engage in a feminist practice which recognizes that there is a will to discover "the woman's point of view", and that doesn't mean one definite point of view.

Is a "feminist critique" a viable method for design history? It is a history of design, and one which can constitute the major though not the means through which the vast majority of women come into contact with feminist ideas.

Yet indirectly it has had an enormous effect on the general dissemination of such ideas, as students pass through these courses and out into the wider society. For one striking difference exists between the university as it exists for men and for women. The fundamentally patriarchal structure of higher education means that it has never been for women an ivory tower of contemplation and privilege. In its protected and enclosed environment, as Virginia Woolf acutely noted in *A Room of One's Own*, the difference between the social position of men and women is highlighted rather than obscured.

Indeed for middle and upper-class women whose parents and early

teachers were more likely to be men, the university was a place where they could escape the constraints of domestic life and the expectations of their families. It was a place where they could find a community of women, and where they could develop their own intellectual and creative interests. This was a place where they could find a sense of purpose and achievement, and where they could find a place for themselves in the world.

The author is a designer and a part-time teacher of design history.

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Cora Kaplan assesses the impact of feminist thought on higher education

A classroom of one's own

In that grim dyspeptic week between Christmas and the New Year which the British set aside for annual recommitment and resolution, I wandered round the rubble of 1984's progressive hopes, looking for some green shoots of radical initiative and promise still intact and growing.

The general siege atmosphere in socialist and feminist camps just now as well as the long-term embattled and defensive position of education under the axe makes it psychologically hard for socialist-feminist academics to recall the political and intellectual optimism of a decade ago and to recognize and celebrate its enduring legacies today. Nevertheless I did at last remember one flourishing project, begun over 10 years ago about which I still felt wholly positive: the development of women's studies in higher education.

I had overlooked it at first simply because it is now so familiar, the stuff of my daily working routine. Yet what had been an almost unimaginable utopian dream in 1974 was now a reality; undergraduates and postgraduates who come to the university where I work, and to many other universities and polytechnics across Britain, can now explore questions of gender and sexual difference in a wide range of courses taught in many disciplines. In a few places there are even MA programmes in women's studies and postgraduate courses can find encouragement, recognition and expert supervision, if little financial support for feminist research projects.

In adult and further education where many of these ideas and initiatives were pioneered in day schools and evening classes, and which remain the most heterogeneous and egalitarian arenas for such teaching and learning, women's studies courses still thrive in spite of the current starvation of funds because the demand for them is so high. This is the third year that the Open University has offered a highly successful and popular course on "The changing experience of women" - though this course too is under threat because of financial constraints.

In many ways "women's studies" is much too limited a description of the content, intellectual thrust and influence of the many courses about gender now being offered in tertiary education. Feminist scholarship has made substantial interventions in most traditional subjects and disciplines, transforming the existing debates as well as raising new issues.

Yet in some ways women's studies is still a useful umbrella term, for there is an important sense in which the aggregate of all these courses and projects form a substantial infrastructure through which women, for whom still constitute the major though not the means through which the vast majority of women come into contact with feminist ideas.

Yet indirectly it has had an enormous effect on the general dissemination of such ideas, as students pass through these courses and out into the wider society. For one striking difference exists between the university as it exists for men and for women. The fundamentally patriarchal structure of higher education means that it has never been for women an ivory tower of contemplation and privilege. In its protected and enclosed environment, as Virginia Woolf acutely noted in *A Room of One's Own*, the difference between the social position of men and women is highlighted rather than obscured.

Indeed for middle and upper-class women whose parents and early

Past before female eyes

The University of London department of extramural studies has published a collection of essays written by members of the 1981-82 Fawcett Library feminist history class. *Studies in the History of Feminism: 1850s to 1930s* contains essays on "Women's work and domesticity in the English Women's Journal", by Moira Macneil; "Emily Faithfull and the Victoria Press", by Kay Sarad; "Portia, Portia and Co."

The author is a lecturer in the school of English and American studies at the University of Sussex.

Women's studies



Women students are more assertive, engaged and imaginative.

ment and existence. In the early 1970s when courses on gender were being planned, feminists in higher education worried quite sensibly about the potential ghettoization of such courses - and ourselves with them - in our respective institutions. We wondered whether, instead, we ought to put all our energies into introducing feminist perspectives in our existing disciplines rather than carving out yet another "separate sphere" for the study of women.

This fear has on the whole proved illusory. The courses have instead staked out a legitimate space for the exploration of sexual difference which has in turn made it easier to introduce these issues and questions in the rest of the syllabus.

We were anxious too about the distance between "academic" feminism and the broader political agenda of the women's movement and the wider constituencies it wanted to reach. We were only too aware how hard-won higher education for women in Britain had been, and how class-bound and partial our access to it still was. For these reasons we understood that under the present educational policies and in the general contracted state of tertiary education, higher education could never directly be the means through which the vast majority of women come into contact with feminist ideas.

Yet indirectly it has had an enormous effect on the general dissemination of such ideas, as students pass through these courses and out into the wider society. For one striking difference exists between the university as it exists for men and for women. The fundamentally patriarchal structure of higher education means that it has never been for women an ivory tower of contemplation and privilege. In its protected and enclosed environment, as Virginia Woolf acutely noted in *A Room of One's Own*, the difference between the social position of men and women is highlighted rather than obscured.

Indeed for middle and upper-class women whose parents and early

teachers were more likely to be men, the university was a place where they could escape the constraints of domestic life and the expectations of their families. It was a place where they could find a community of women, and where they could develop their own intellectual and creative interests. This was a place where they could find a sense of purpose and achievement, and where they could find a place for themselves in the world.

The women's studies courses all over the country imperilled by cuts and contractions are a vital part of this educational project. They are by no means perfect, but they have proved responsive to critiques about both class and race bias in their orientation. They have raised, not lowered the demand for greater access to higher education. An indispensable resource, they have transformed and enlightened aspects of the academy at a moment when, too often it seems to be a dark pit of fear, conservatism and retreat.

The author is a lecturer in the school of English and American studies at the University of Sussex.

In my own university I have noticed

that women students are more assertive, engaged and imaginative.

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Women's studies

Jennifer Breen analyses the growth of feminist publishing in Britain

Cutting off men's tales

Which publishers and books comprise feminist publishing in Britain? Onlywomen, Sheba, Stramullion, The Women's Press, and Virago obvious? These presses appear to be operated by women and they concentrate on publishing books by women. And they all see themselves as standard-bearers in the Women's Crusade to cut off men's tales rather than our own noses.

But what about The Women's Press? It pushes the appropriate line - "we [are] making a space for women in a male-defined world, and we publish only books written by women". Yet, since it began in 1977, it has been financed by the Namur Group which is in effect the one-man-band, Mr Naim Attallah, who is the subject of much innuendo in *Private Eye*. Despite this bizarre dependence on Attallah, The Women's Press publishes works, such as Joanna Russ's *How To Suppress Women's Writing*, that are profoundly critical of the darkness-in-daylight side of male behaviour.

It is also publishing important writing which militates in favour of domestic and social change; its most popular titles include Alice Walker's major novel about black women's aspirations, *The Colour Purple*, Marge Piercy's feminist science fiction, *Women on the Edge of Time*, and Sue Cartledge and Joanna Ryan's anthology of anti-sexist essays, *Sex and Love: New Thoughts on Old Contradictions*. And, in a recent new novel, *Out on the Plain*, Frankie Finn, in a kind of portrait of the artist at her work, not only experiments with the form of the novel but also satirizes her imagined male critics.

The quality of the editorial and publishing work of these women editors and directors have managed to sustain an independent women's publishing ethos more effectively than "the feminist subsidiaries" such as Pandora (Routledge & Kegan Paul's recent "feminist imprint"). This offshoot is run by two women, but is supervised by their parent company's directors about what they publish - "anything that will sell". Pandora's "feminist" list consequently contains nothing so controversial that it might lose patriarchal money, but it nevertheless includes several interesting rediscoveries such as Mrs Gaskell's *Four Short Stories* and Susan Koppelman's anthology of nineteenth century short stories, *Old Maids*, by American women authors.

But what of the self-supporting spearhead of "women's movement" publishing, Virago? Has this example of successful female entrepreneurship been one of the main factors in provoking the male-dominated mainstream firms into publishing a rash of "women's studies" books? Probably, yes. Virago started in 1972 under Carmen Callil and was at one time financed by a loan from the Rowntree Trust. Since 1982, when Carmen Callil became a director also of Chatto, Virago has formed an editorially independent part of the Chatto, Bodley Head and Cape Group.

Virago has grown from a turnover in 1977 of £30,000 to that of £1m in 1984. How did they do it? Certainly not by confining themselves to any doctrinaire political view of how to improve women's lot: they publish books "which illuminate and celebrate all aspects of women's lives". In other words, they are women who publish books by women (with a few exceptions) about women; each book has an innovative format, but very few of their authors have been willing to risk tipping us out into the water.

Virago's bestsellers include Vera Brittain's *Testament of Youth* (65,000), Antonia White's *Prot in May* (35,000) and Maya Angelou's *I Know Why the Caged Bird Sings* (30,000). Such writers and others like Rosamond Lehmann and Rebecca West, however good in their way, seldom stimulate thinking about women's lives. Virago has sometimes been criticised

also for doling out a steady stream of romantic pap which obscures its genuinely high-quality classics and their new launches. "Victorian Classics" and "Virago Classics" look set to continue this same all-in publishing phenomenon.

But perhaps we should recognize how Virago has built up series of reprints which display first-rate women authors such as Dorothy Richardson and Christina Stead in the illuminating context of women's writing as a major, occasionally the major strand of our literary tradition. As Joanna Russ claims, "higher education has had one bad effect not foreseen... an informal acquaintance with the common female tradition in literature has been replaced by a formal education which entirely omits it" (*How To Suppress Women's Writing*). Thanks to Virago and to some extent also The Women's Press and a few mainstream publishers, we can now increase our informal knowledge of our female literary tradition... including several major works, such as Stead's *Cotters' England* and May Sinclair's *The Three Sisters*, which have yet to be accorded their place in the mostly male canon of the Eng. Lit. academic establishment.

The other three all-women publishing firms - Onlywomen, Sheba, and Stramullion - are less central. Onlywomen Press represents an extreme part of the women's liberation movement that began in the late 1960s. This small printing and publishing cooperative, which began in 1974, consists of women who want to cut themselves off from men completely, especially from that male craving for power which for these women is particularly evident in heterosexual relationships. Lesbian or lesbianism is, for them, the only answer to the problem of how to free themselves from men. Onlywomen describes itself as "a radical feminist and lesbian press", which means that it publishes only books and pamphlets that further its idea of usurping men's power both in the private and public world.

Initial small print runs of 4,000 have led to nearly all its list being reprinted several times; for example, its feminist poetry anthology, *One Foot on the Mountain*, has been reprinted three times. "Lesbian fiction" apparently also sells, but rose-coloured "lesbian romances" such as those in the anthology, *The Reach and Other Stories*, are of no more value than the "straight" women's mag slash.

Sheba and Stramullion, which were both founded in 1980, do not share Onlywomen's doctrine of separation from and rejection of men; instead, these two small, mainly self-financing cooperatives, with limited print-runs which bring little or no profit, aim to publish "radical feminist" or any kind. Stramullion ("an old Scots word for a strong woman") states unequivocally that it intends to concentrate on "the reality of women's lives - whether expressed through fiction, poetry, or non-fiction - rather than on stereotyped assumptions about women". It gives priority to works that have a Scottish dimension, but despite this restriction, some of its publications, such as Ellen Galford's parodic historical romance, *Moll Curpess* - *Her True History*, and Sarah Nelson's provocative and well-researched novel - *Fact and Myth*, have had a justifiably wide impact.

Sheba Feminist Publishers not only bring out women's books but it also helps authors in the actual process of writing. At the moment this press is trying to encourage black women in particular both to write and to publish; its anti-travelogue, *Our Own Freedom*, about African women - photographs by Magie Murray and text by Buchi Emecheta - is a telling parody of mainstream publishers' "coffee table" books about "naked Africa". In 1985 we should have its anthology of black women's fiction, poetry and prose.

Of course, the mainly male directors in many of the established publishing houses follow the new "trend" in "women's studies" with business au-



Detail from an embroidered runner, by Beryl Weaver, illustrated in *The Subversive Stitch* (The Women's Press).

men - and some have more of it than others; Methuen, for example, have reprinted Maureen Duffy's *Wounds*, an interesting novel which shows how twentieth century men needs liberating from his crippling dominance of women as much as women need liberating from their mostly self-imposed and/or socially-induced traps. The academic gobbledegook, however, in some of the "women's studies" books such as those in Harvester's new series, "Key Women Writers" and "Feminist Readings" (of fiction written by men), is chaff in the wind which does nothing towards extending women's sexual, social and economic equality with men.

Among the many small presses - and also in a few of the big publishing houses - some editors and publishers seek out the innovative feminist writers and print their work for its originality rather than in the hope that these books will make a lot of money. Sue Fleming, at the Falling Wall Press, for example, which was founded by herself and Jeremy Mulford, actually claims that their press was the first to bring out modern feminist publications. In 1971 Fleming and Mulford set out to publish books that "other publishers wouldn't touch", and, since Fleming had worked in the women's liberation movement from the late 1960s onwards, many of the books on selling fall's late feminist awareness of new ideas in feminism.

As Fleming remarked, "Virago and The Women's Press are not out to shake everybody up", whereas the aim of the Falling Wall Press is to nudge readers into seeing the world differently. Mariarosa Dalla Costa and Selma James' *The Power of Women and the Subversion of the Community* (1972), for example, one of their first books, has "changed the lives" of some women: "Now we know... We are always their indispensable work-force... servicing men physically, sexually and emotionally." But these authors offer few solutions, apart from those of "Wages for Housework" and equal pay at work.

Another small press which makes a

significant contribution to women's publishing is Neil Astley's Bloodaxe (named after the last of the Viking kings in Northumbria). This press began in a small way in 1978, but, with the help of Northern Arts funding in 1980, Bloodaxe developed its list of "good literature", including works by women authors and poets.

Astley seeks, not to be "radical", but to be "interesting and different" and thus he publishes authors whose ideas tend to diverge from the current fashionable. When Jeni Couzyn's anthology of women's poetry was rejected by Heinemann Educational, Astley took it on, redirecting Couzyn from the schools market to the women's movement readership. With Couzyn's *Women's Poets* out last year, it is now possible to compare the quality of several relatively unknown twentieth century women poets, since up till now only a few women have been represented in anthologies.

Women's poetry now seems to be in vogue. Virago began a new series of contemporary women poets ("a risk" in September this year, and the recent *In the Pink*, a television poetry anthology published by The Women's Press, has sold well.

All these developments reflect the fact that women want to read about women from a feminist viewpoint instead of the usual male assumptions about how women are or are not. Few directors and commissioning editors in the big mainstream publishing houses have been keen to bring out books by women who openly show up men's weaknesses or subvert their position as top dogs.

Unless male dominance in society is somehow reformed or overturned, the small feminist publishers will always have a readership among women for books that reveal and interpret women's reality. These small publishers' eventual success will mean their own demise.

The author is senior lecturer in language and literature at the Polytechnic of North London.

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Women's studies

Engineering a new approach

Cynthia Cockburn explains why so few women hold influence over new technology

While the great engineer Isambard Kingdom Brunel was transforming the face of Britain with his steel structures, no doubt Mrs Brunel was at home in the kitchen keeping an eye on the servants. That was not surprising, perhaps, in the social climate of Victorian England. But how is it that the statistics of engineering today show such a striking absence of women?

Not only do men represent 99 per cent of the membership of the main professional engineering institutions, but things look little different in the coming generation. Females are 9 per cent of students of engineering degree courses and fewer than that in many of the specialisms. They number a little over 2 per cent of those passing Business and Technician Education Council engineering technician exams. And at the more basic level of craft, women entrants to City & Guilds engineering awards hover round the 1 per cent mark. There are plenty of women in the engineering industry: more than a third of a million at the last count. But more than half of these are in low-paid routine assembly and operating work, and 40 per cent in clerical jobs.

It is often suggested that the older technologies: steam-driven, mechanical, electrical, were unsuitable for women because they involved work that was sometimes heavy, dirty or dangerous. However one views the preconception about women that implies, one might still suppose that today's electronics revolution, with its lighter, cleaner processes, would usher in a new dawn of engineering opportunity for women.

I have recently spent two years researching that proposition in some "new technology" workplaces. The findings are gloomy. Women are considered highly desirable as operators of the new-age equipment. Yet the old unwritten law still prevails: women may push the buttons but they may not meddle with the works. The jobs of maintenance engineer, field service engineer or repair technician are still almost universally filled by men. So too are the higher level jobs of systems technologist whether designing or developing the new equipment, marketing or managing it. The electronics engineer, it seems, is just as likely to be a man as was the mechanical engineer.

Well, some might say, perhaps women are better off sticking to the jobs for which "nature intended them". This might be fine were it not for three things. First, some women are more drawn to technology than hairdressing. Second, the jobs that women tend to end up in are far lower paid than those of the average technological male. And third, economic forecasts show that it is the technological jobs, from that of the humblest maintenance technician to that of the loftiest design engineer, that have the best chance of surviving into the twenty-first century. Through the technology may have to adapt and change to advancing technology, someone is going to have to keep the circuits functioning, to modify and improve the systems - even to oil the moving parts, for moving parts there undoubtedly still will be.

Technological know-how and competence are a source of power. Women as a sex are deprived of the physical initiative, the spatial freedom, the self-respect and independence, and the privilege of the man who knows his technology. "Hands-on", "can-do", the engineering clichés ring with confidence.

Whether it is being in demand on the housing estate as the one who knows how to fix the washing machine and cure that ignition problem, or whether it is being known in the engineering world as being ahead of the state of the art in robotics, a person with engineering know-how carries a certain authority. The person is invariably a man. Perhaps indeed we should be thinking of the power to control machinery as one facet of men's power to control



Many women have an appetite for technical know-how

Employers argue that today their doors are wide open to women. Equality of opportunity is there, ready and waiting. It is just that there are no women coming forward for the jobs. Teachers in further education no doubt say the same. They surmise that social attitudes, fed to the girl child by teacher and parent, have already done irreparable damage to the school leaver.

The average girl, it is true, does not consider a career in engineering. Yet it is too simple to assume thereby that women are untalented with machinery and unenthusiastic about it. My research showed many women to have an appetite for technical know-how and a stubborn belief that given half a chance they could prove competence. Does any girl perhaps lie in wait in the places where training and technical work are carried on? Maybe rumours travel back from beyond the open door of equal opportunity.

If one was to say that "technology is masculine", both men and women might be understandably affronted. But, while machinery itself certainly has no sex, the relations that surround its invention and use clearly do. Not all men are into technology. But those that are create a strongly masculine environment around it. Relationships are forged, camaraderie develops, through an exchange of technical know-how and technical gossip. Men in groups create an environment into which few women can fit without discomfort.

It is not simply that gender dictates what job a man or a woman will do. Occupational divisions actively construct gender difference. The technological incompetence that now characterizes women due to their lack of technical training and work is an intrinsic part of what we understand by "femininity". Likewise the social and emotional rigidities that characterize men, due to their absence from caring and support roles at work and at home is an intrinsic part of what we understand by "masculinity".

We are made to pay dearly if we transgress gender-roles. Men are called "proffers" if they go into hairdressing or child-care. Women are seen as unlovable if they wear overalls and get dirty hands. It is hardly surprising then that more women don't try to enter the technological sphere. Perhaps we are even boycotting it. Is the higher pay, the better prospects, the more interesting work worth that aggravation?

The approach of the engineering industry itself has been to make intensive sales pitch to women, appealing to their intelligence and sense of adventure, meanwhile emphasizing the least strenuous aspects of engineering. The Engineering Industry Training Board has run "faster" courses for A level girls to attract them on to engineering degree courses and it has paid premium grants to employers who take on girl technicians.

But let us suppose for the moment that women, far from being their own worst enemies as many a personnel manager supposes, are actually quite right in fearing the lack of welcome and the social difficulties they will

encounter in a masculine world. Then the industry's invitation appears something like that of the spider to the fly.

Many women in the course of my research made it clear that it is the presence of men that impedes them from learning technical skills, whether at home, in college or at work. I believe we have to take this seriously and make provision for many more women-only courses in which women can build up their confidence and ability. Harrogate Women's Training and Education Centre, Women and Training (South London), the Sheffield Women's Technical Training Workshop and the East Leeds Women's Workshop are examples of technical training facilities organized by women for women. They are continually over-subscribed.

Unfortunately there are many factors working against extending these experimental and under-funded training initiatives into a widespread provision for women. The climate of cuts in further education and a shift to market forces in training (which have never served women well), do not help. Nor does the expansion of the Manpower Services Commission's empire since that body has a scant record of positive thinking of positive action for women. Even the Sex Discrimination Act, framed though it was for women's benefit, works against us in one respect. Women-only courses must go through a cumbersome procedure of individual approval by the Secretary of State before they are even legal.

Should we, however, be expecting women to do all the adapting? The onus is surely on those who manage technical further and higher education to recognize the deterrent effect on women of the totally masculine environments over which they preside. It is no good recruiting women students in token singles and women teachers not at all. Nor is it any use ignoring the domestic constraints that bear on women and not on men.

Courses in skill centres that start at 8 am, City & Guilds courses on which all the trainees are newly apprenticed lads of 16, don't match the needs of young women who had children first and came to technology later. And when will a nursery be as much of a requirement to colleges as a canteen is today? Employers, too, need to reexamine their preconceptions. For every woman who leaves to have a baby, does not a man further his career by accepting a job with a competing firm? Above all employers need to demonstrate that they expect men, too, to carry domestic responsibilities that reduce their availability for overtime, impede their free mobility and cause them to take career breaks now and then.

If I. K. Brunel had been expected to tend to the children and the shopping, Britain might have fewer feats of engineering. Or would it? Perhaps Mrs Brunel would have had the chance to design the odd bridge. And who is to say that she might not have made a better job of it than her husband?

The author is research fellow in the department of social science, City University, London.

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 Department of Asian Studies
 Applications are invited for a full-time position in the Department of Asian Studies. The appointee will be responsible for teaching in the field of Indo-Pakistan Studies and will be expected to contribute to the research and publication in this field.

LECTURER IN INDO-PAKISTAN STUDIES
 Reference No. 206
 Department of Asian Studies
 Applications are invited for a full-time position in the Department of Asian Studies. The appointee will be responsible for teaching in the field of Indo-Pakistan Studies and will be expected to contribute to the research and publication in this field.

LECTURER IN INDO-PAKISTAN STUDIES
 Reference No. 207
 Department of Asian Studies
 Applications are invited for a full-time position in the Department of Asian Studies. The appointee will be responsible for teaching in the field of Indo-Pakistan Studies and will be expected to contribute to the research and publication in this field.

LECTURER IN INDO-PAKISTAN STUDIES
 Reference No. 208
 Department of Asian Studies
 Applications are invited for a full-time position in the Department of Asian Studies. The appointee will be responsible for teaching in the field of Indo-Pakistan Studies and will be expected to contribute to the research and publication in this field.

LECTURER IN INDO-PAKISTAN STUDIES
 Reference No. 209
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REMINDER

COPY FOR CLASSIFIED ADVERTISEMENTS IN THE T.H.E.S. SHOULD ARRIVE NOT LATER THAN 10AM MONDAY PRECEDING PUBLICATION

La Trobe University Melbourne

LECTURER IN LEGAL STUDIES (REDAVERTISED)
 (Fixed term - 4 years)
 School of Social Sciences
 The Department of Legal Studies invites applications from persons qualified to teach subjects in the field of Law. The appointee will be responsible for teaching in the field of Law and will be expected to contribute to the research and publication in this field.

LECTURER IN ITALIAN STUDIES (Fixed term)
 School of Humanities
 Applications are invited for a full-time position in the Department of Italian Studies. The appointee will be responsible for teaching in the field of Italian Studies and will be expected to contribute to the research and publication in this field.

LECTURER IN ITALIAN STUDIES (Fixed term)
 School of Humanities
 Applications are invited for a full-time position in the Department of Italian Studies. The appointee will be responsible for teaching in the field of Italian Studies and will be expected to contribute to the research and publication in this field.

LECTURER IN ITALIAN STUDIES (Fixed term)
 School of Humanities
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 School of Humanities
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 School of Humanities
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LECTURER IN ITALIAN STUDIES (Fixed term)
 School of Humanities
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related field and, preferably, experience in tertiary administration and/or tertiary teaching. Preference will be given to applicants with research or teaching experience in tertiary education organisations. The appointee will be responsible for teaching in the field of Law and will be expected to contribute to the research and publication in this field.

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THE UNIVERSITY OF WOLLONGONG Australia

Equality of employment opportunity is University policy. The University reserves the right to fill any advertised position by invitation. Applications are invited from suitably qualified and experienced persons for:

DEPARTMENT OF CHEMISTRY
 Research Associate (Position Reference CHEM)
 A postdoctoral appointment for 2 years available under an A.R.C.S. grant to Professor L. Kane-Maguire to work on the mechanisms of nucleophilic attack on co-ordinated hydrocarbons and the use of such reactions in asymmetric synthesis.

Applicants should have research experience in either inorganic, organometallic, or organic chemistry, although a physical chemistry background with experience in kinetics may also be advantageous. Further information from Professor L. Kane-Maguire (042-270509).

DEPARTMENT OF CIVIL AND MINING ENGINEERING
 Lecturer or Senior Lecturer - Mining Engineering (Tunurable or Limited Term 4 years) (Position Reference MINING)
 Applicants should be qualified in mining engineering. At least five years industrial and academic experience is required, preferably in research and teaching practice of underground or surface mining in mining engineering, and maintaining close liaison with the mining industry. Further information from Professor L.C. Schmidt (042-270404).

DEPARTMENT OF ECONOMICS
 Lecturer (2 positions) (Tunurable or Limited Term 4 years)
 Applicants should be qualified in quantitative methods or econometrics with either macroeconomics or microeconomics (Position Reference ECON).

Applicants may be economists from any area but preferably with expertise in macroeconomics (Position Reference ECON). Further information from Professor D.A. Jackson (042-270506).

DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING
 Lecturers (3 positions) (Tunurable and/or Limited Term 4 years) (Position Reference ELEC)
 Applicants may have expertise in one or more of the following areas: computer engineering, microprocessor applications, VLSI design, microwave imaging, antenna arrays, communications, power electronics, machines and electrostatics.

An Industrial Automation Centre has been established on campus to provide a consultant service to industry in the field of industrial automation, components and systems. Opportunities exist within the Department for staff to participate in the research and development programme arising from the activities of the Centre. Further information from Professor B.H. Smith (042-270508).

ENGLISH LITERATURE AND DRAMA
 Lecturer (Limited Term 4 years) (Position Reference LT)
 Applicants should be able to teach in any area of English Literature from Shakespeare to the present day, preferably with expertise in nineteenth and twentieth century literature. Further information from Dr. J.M. Wieland (042-270577).

SCHOOL OF HEALTH SCIENCES
 HUMAN MOVEMENTS/SPORTS SCIENCE - EXERCISE THERAPY
 Lecturer or Senior Lecturer (Tunurable or Limited Term 4 years) (Position Reference HMSC)
 The School services Bachelor and Master of Education (Physical and Health Education programmes) degree courses, offers an Associate Diploma in Sports Science, and expects to commence undergraduate and graduate courses in Human Movement Science in 1985.

Applicants should have expertise in exercise therapy, therapeutic recreation or movement re-education together with experience in community work with disabled persons. Further information from Dr. M.J. Hough (042-270761).

SCHOOL OF INDUSTRIAL AND ADMINISTRATIVE STUDIES
 Lecturers (2 positions) (Tunurable and/or Limited Term 4 years) (Position Reference IAS)
 The School offers Associate Diploma and Degree level studies in the field of computer technology to a range of business, administrative, technical and social sciences. Teaching is based on a microcomputer centre, currently equipped with Apple II and Sperry Model 25 machines; together with access to UNIVAC 1100/80 mainframe system.

Applicants should have expertise in one or more of the following: design and development of computer based on-line systems; management information systems; data base information systems; preferably in a commercial environment; development of distributed network systems; development of office automation systems. Further information from Dr. M.J. Hough (042-270761).

DEPARTMENT OF PSYCHOLOGY
 Lecturer or Senior Lecturer (3 positions) (Tunurable and/or Limited Term 4 years)
 The Department specialises in an experience-based approach to teaching and research in developmental/social/clinical psychology. Positions will be filled in three of the following four areas: Cognitive Psychology (Position Reference PSYCH 1); Social Psychology (Position Reference PSYCH 2); Health Psychology (including the teaching of psychology to nurses); (Position Reference PSYCH 3); and Experimental Psychology (Position Reference PSYCH 4).

Further information from Associate Professor Linda L. Vinay (042-270742).

Senior Lecturer - A33,331 - A33,847
Senior Lecturer II - A33,476 - A33,647
Lecturer I - A24,840 - A24,854
Lecturer II - A24,855 - A24,869
Lecturer III - A24,870 - A24,884
 For Position References HMSC, HUSO and IAS

Applicants should specify the nature (e.g. tenurable or limited-term or other) and level (e.g. Lecturer or Senior Lecturer) of the position sought and also quote the Position Reference Number. Further information on conditions of appointment from Mr. Ross Walker in the University (042-270934). Applications, containing details of qualifications, employment history, research interests, publications, and the names and addresses of three referees, should reach the University Secretary, The University of Wollongong, P.O. Box 114, Wollongong, N.S.W. 2500, Australia, by 1 March 1985, except for the post in Psychology for which applications close on 18 April 1985. Please mark envelope 'Appointment Application'. A copy of the application should also be sent to the Secretary General, Association of Commonwealth Universities (ACU), 36 Gordon Square, London WC1H 0DF, from whom conditions of appointment are available. (02073)

University of Bradford
LECTURER IN MEDICAL BIOCHEMISTRY
 Applications are invited for a permanent and full-time position in the Department of Medical Biochemistry. The appointee will be responsible for teaching in the field of Medical Biochemistry and will be expected to contribute to the research and publication in this field.

Applicants should have a B.Sc. or equivalent in Biochemistry, and a minimum of three years' experience in the field of Medical Biochemistry. Further information from Professor L. Kane-Maguire (042-270509).

University of Aberdeen

CONTRACTS ADMINISTRATION
 Applications are invited for a full-time position in the Department of Contracts Administration. The appointee will be responsible for teaching in the field of Contracts Administration and will be expected to contribute to the research and publication in this field.

Applicants should have a B.Sc. or equivalent in Contracts Administration, and a minimum of three years' experience in the field of Contracts Administration. Further information from Professor L. Kane-Maguire (042-270509).

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Universities continued

The University of New South Wales
 School of Accountancy
 Applications are invited for a full-time position in the Department of Accountancy. The appointee will be responsible for teaching in the field of Accountancy and will be expected to contribute to the research and publication in this field.

Applicants should have a B.Sc. or equivalent in Accountancy, and a minimum of three years' experience in the field of Accountancy. Further information from Professor L. Kane-Maguire (042-270509).

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The Chinese University of Hong Kong
 Invites applications for the post of
LECTURER IN CHEMISTRY
 Applicants should have a B.Sc. or equivalent in Chemistry, and a minimum of three years' experience in the field of Chemistry. Further information from Professor L. Kane-Maguire (042-270509).

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King's College Chelsea College Queen Elizabeth College University of London

CHAIR OF ELECTRONICS
 The Senate invite applications for the post of Professor of Electronics in the Department of Electronics Engineering. The appointee will be responsible for teaching in the field of Electronics Engineering

Fellowships

Wolfsen College Oxford

STIPENDIARY JUNIOR RESEARCH FELLOWSHIP IN THE HISTORY AND/OR PHILOSOPHY OF SCIENCE AND/OR MATHEMATICS

Applications are invited from men and women, preferably under 30, for the above Junior Research Fellowship, lasting for 3 years from 1 October 1985 at an annual stipend of £5,487 plus an annual allowance of £1,000 for academic salaries awarded after 31 March 1985. The closing date for applications is 28 March 1985.

Further particulars are obtainable from the President, Secretary, Wolfsen College, Oxford OX2 6UD (51100) H2

University of Warwick

Department of Sociology

OVERSEAS VISITING RESEARCH FELLOW

The Department of Sociology offers an Overseas Visiting Research Fellowship, to be awarded on an annual basis from 1 October to 31 September of the following year. The Fellow will be expected to play a full role in the life of the department, including giving seminars and supervising students. The Fellowship is designed primarily for established overseas academics who are able to arrange leave from their own institution and provide an honorarium of £10,000 to cover travel, subsistence and research expenses.

Further details may be obtained from the Secretary, The Department of Sociology, University of Warwick, Coventry CV4 7AL. Applications for the academic year 1985-86 should be received by 31 March 1985 and for the year 1986-87 by 31 December 1985. (51056) H2

Wolfsen College Oxford

CHARTER FELLOWSHIPS 1985-6

IN MUSIC, PHILOSOPHY, SOCIAL ANTHROPOLOGY

Wolfsen College, Oxford, offers three Charter Fellowships in Music, Philosophy and Social Anthropology to persons holding a University Lectureship (or comparable position) in the UK or abroad. Fellows will be expected to carry out research in their own field, but may also be expected to teach or supervise students. The Fellowship is for one academic year, but may be extended for a second year.

Fellowships carry no stipend, but the College will make a contribution towards the living expenses of each Fellow. College accommodation at the normal rate may be available.

Further particulars may be obtained from the President or Secretary, Wolfsen College, Oxford OX2 6UD. (51059) H2

Wolfsen College Oxford

NON-STIPENDIARY JUNIOR RESEARCH FELLOW

The College proposes to establish about twelve non-stipendiary Junior Research Fellowships, without limitation of subject, for two years in the first instance (renewable for not more than one further two-year term), from 1 October 1985. The closing date for applications is 31 March 1985.

Further particulars are obtainable from the Secretary, Wolfsen College, Oxford OX2 6UD (51100) H2

PLEASE MENTION THE T.H.E.S. WHEN REPLYING TO ADVERTISEMENTS

NORTH STAFFORDSHIRE POLYTECHNIC

OPPORTUNITIES IN MANAGEMENT

North Staffordshire Polytechnic
Department of Management Studies
PRINCIPAL LECTURER
SENIOR LECTURER/LECTURER II
TEMPORARY LECTURER II

Salary Scales:
Principal Lecturer £13,095 - £14,580 (Bar) - £16,467
Senior Lecturer £11,175 - £13,128 (Bar) - £14,061
Lecturer II £7,548 - £12,099

Applicants for these three appointments must have significant industrial/commercial experience, together with proven academic ability in at least two of the following:

Small Business Development
Tourism, Leisure, Recreation
Public Sector Management
Operations Management
Accounting/Finance
Quantitative/Economics
M.S./A. Tech.
Marketing
Communications

PRINCIPAL LECTURER to provide leadership in developing post-experience diploma and higher degree programmes for managers.

SENIOR LECTURER/LECTURER II to assume course management responsibilities.
TEMPORARY LECTURER II, a two year term appointment, secondment considered, with possible contract renewal, to assist in developing more flexible and open learning programmes for professional managers.
All three appointments are available immediately.

West Midlands Regional Management Centre
MARKET DEVELOPMENT MANAGER
£13,095 - £16,467

Initially for two years, commencing 1st April, and funded through an Education Support Grant this post is expected to achieve self funding and accordingly will be subject to annual review; secondments considered. The manager will join a dynamic R.M.C. seeking to extend its services to industry/commerce on behalf of its constituent colleges and polytechnics. The person appointed will report to the Joint Head of W.M.R.M.C./Department of Management Studies.

All three posts are available to both male and female applicants. Application forms and further particulars may be obtained from The Personnel Officer, North Staffordshire Polytechnic, College Road, Stoke-on-Trent, ST4 2DE. Tel: (0782) 45531, Ext. 211.

Closing date for applications - Friday, 15th February, 1985. (02056)

Further particulars may be obtained from the President or Secretary, Wolfsen College, Oxford OX2 6UD. (51059) H2

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LIVERPOOL POLYTECHNIC

HEAD OF DEPARTMENT OF SURVEYING
GRADE VI £17,397-£19,170

Applications for the above post are invited from persons with appropriate academic and professional qualifications. The Department's current work includes undergraduate courses in surveying, estate management and quantity surveying, postgraduate and continuing professional development work.

The successful applicant will have a wide knowledge of surveying, sound management skills and strong teaching, research, and professional interests and experience.

HEAD OF DEPARTMENT OF SOCIAL WORK
GRADE V £16,098-£17,877
(Re-advertisement)

Applicants will be expected to have a proven successful record in academic leadership through research and/or consultancy in the social work or social administration.

For further particulars and an application form contact the Personnel Officer, Liverpool Polytechnic, Rodney House, 70 Mount Pleasant, Liverpool L3 5UX. Tel: 051 207 3881, Ext. 2820.

Closing date: Friday 15th February, 1985.

Liverpool Polytechnic is an Equal Opportunity Employer and welcomes applications irrespective of race, sex, marital status or disability.

LIVERPOOL POLYTECHNIC

DEPUTY RECTOR (RESOURCES)
£24,348-£25,227
Vice Principal Group 12 Scale (Re-advertisement)

Applications are invited from individuals who, by their background and experience, are equipped to undertake major responsibility for the management of this fourth largest Polytechnic in the UK. The successful candidate will need to demonstrate key qualities of academic leadership, managerial skills and political acumen.

DEAN OF BUSINESS AND MANAGEMENT STUDIES
£18,573-£20,346

The Dean of Faculty will be responsible to the Rector for academic leadership and management of this large Faculty, which has over 1,000 FTE students studying of a range of degree, diploma and postgraduate full and part-time courses. The Faculty embraces the Departments of Accounting and Finance, Business Studies, Law, and Management Studies.

Candidates for the post should have significant managerial experience and an academic reputation within one of the subject areas covered by the work of the Faculty.

For further particulars write to John McKenzie, Rector of the Polytechnic, Rodney House, 70 Mount Pleasant, Liverpool L3 5UX (Telephone: 051 207 3881, Extension 2828), to whom applications must be returned not later than Monday 18th February, 1985. Liverpool Polytechnic is an Equal Opportunity Employer and welcomes applications irrespective of race, sex, marital status or disability.

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Polytechnics continued

PAISLEY COLLEGE

A Scottish Central Institution

LECTURER/SENIOR LECTURER IN CHEMISTRY

The successful applicant will teach on the Honours Degrees in Chemistry and Industrial Chemistry and undertake research. Preference will be given to candidates with an interest in Organic Chemistry with industrial experience.

Salary Scale - L'A' £ 8888 to £13176
SL'A' £12777 to £16104

Application forms and further particulars are available from THE PERSONNEL OFFICER, PAISLEY COLLEGE OF TECHNOLOGY, HIGH STREET, PAISLEY PA1 2BE (Tel: 041-987 1241 ext. 230). (02056)

TEESSIDE POLYTECHNIC

DEPARTMENT OF DESIGN

Applications are invited for the post of

Senior Lecturer in Ergonomics/Industrial Design.

The Design Department offers two BA (Hons) Courses in Industrial Design (Engineering) and Interior Design. The successful candidate will be expected to service both courses in Ergonomics and Applied Psychology throughout the three year duration of each course.

There is an emphasis on Computer Aided Design within both courses.

Applicants should have industrial/professional experience and appropriate teaching experience is desirable.

Candidates should possess qualifications (or equivalent) as well as a Postgraduate Degree.

Salary: £11,175 - £13,128 (work year) - £14,061 per annum.

The salary on appointment will be no greater than £13,128 per annum.

Closing date for applications: 10 April 1985.

An Equal Opportunity Employer.

Application forms and further particulars are available from the Personnel Officer, Teesside Polytechnic, Borough Road, Middlesbrough, Cleveland TS1 3BA. Telephone: (0642) 218121, Extension 4114. (02056)

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OXFORD POLYTECHNIC

OXFORD POLYTECHNIC LIBRARY

Deputy Librarian and Head of Technical Services

PRINCIPAL LECTURER
£13,095-£16,467
Post Ref No. 09/02

Applications are invited from Chartered Librarians for the above post. Previous management experience at senior level in academic libraries is essential, together with a detailed knowledge of automated library systems and an interest in information technology.

The postholder will supervise the operation of technical services in the Library (acquisitions, cataloguing and circulation control) which use BLCMP's BOSS and CIRCO systems, will be responsible for planning future developments in these areas and will also be involved in the day-to-day management of the Library in this two-site Polytechnic.

The salary is on the Principal Lecturer scale within the range £13,095-£16,467.

Further details and an application form are obtainable from the Staffing Office, Oxford Polytechnic, Finsbury Avenue, Oxford OX1 1JF. Telephone: 0865 64777, ext. 364.

Closing date: 14 days after the appearance of this advertisement. (02077)

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North East London Polytechnic

CAREERS ADVISER

Applications are invited from Graduates of any discipline for the above post. Duties include Career Guidance through individual interviews and group sessions, liaison with Employers and Academic Staff, assisting with the development of appropriate information based and the general administration of the service.

The candidate will cover a wide range of courses from Art and Design to the Social Sciences, through to Science and Independent Study.

Candidates should have either considerable work experience as a Careers Adviser in Higher Education or in a Local Authority and/or working experience in one or more fields employing graduates.

